

<400> 4908

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gcggtggctc agtgcttcct ggccgagaac gactgggaga tggaaagggc tctgaactcc 180
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cccaagacct atgttgacct aaccaatgaa gaaacaactg attccaccac ttctaaaatc 300
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gctttgtaca gcccgatgt gatatttcta caggaagtta ttccccata ttatagctac 480
ctaaagaaga gatcaagtaa ttatgagatt attacaggc atgaagaagg atatttcaca 540
gctataatgt tgaagaaatc aagagtgaat ttaaaaagcc aagagattat tccttttcca 600
agtacaaaaa tgatgagaaa accttttatg tgtgcatgtg aacgtgtcag gaaatgagct 660
ttgccttaag acatcccaat tggngaaca ccanaggga tctgcgggaa cgaatgaatc 720
agtttaaaat gggttttaan gaaaatgcaa ga 752

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<210> 4909

<211> 691

<212> DNA

<213> Homo sapiens

<400> 4909

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ctccgcattc tgcgtgattt gtgcaacaga gtccccacat gggcaccatt gaaaggatgg 180
ccactagaac ttatatgtga aaagtctata ggtacttgta atagaccttt gggcgctggg 240
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ggtcttcatg atccttgtga gcgagacca acagatgctc tgagctatat gaccatccag 360
caaaaagaag atattacca cagtgcacag catgcactca gactatcagc ctttggccag 420
atttacaag tgctggagat ggacccccctt ccatctagta agccttttca gaagtattcc 480

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tggtcagtta ctgataaaga aggtgctggg tcttcagctc taaagaggcc atttgaagat 540  
 ggattagggg atgataaaga cccaacaag aagatgaaac gaaacttaag gaaaattctg 600  
 gatagtaaag caatagacct tatgaatgca ctaatgaggc taaaatcaga tnangcctgg 660  
 ggcttcagta taagctccta tctcantctg g 691

<210> 4910

<211> 831

<212> DNA

<213> Homo sapiens

<400> 4910

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 catttactct cttttttgta atgcactctg agcaatcctc caggcagatc ctatttacta 180  
 agcttcaggc ttttgtccca ttttataatg cccaaacaca tggagaaaac attttgttgt 240  
 ttttaaaaac aggtatggga tttctgatat aatcaatttt attgacttct tgggagttgt 300  
 aatgatctgt gactcactgc ataatatgt agttttatag ggtggcacat caccctgtgt 360  
 aaaacaactt taatgacctg aggactgatg agtacaggaa gtgaggttta tcatgagtag 420  
 catttattaa gcatctgcta gaatcaaagc actgcattag ctactaaggt acaaagtaag 480  
 acacagttta ataaggaaga cagggcactc acccaagtca acagttcagt gacatctgtt 540  
 atttgaacca cacaccaatg caaccgaagt aaatgctgaa agggtgagaa gaaggaatag 600  
 attactatgc atttttgaga ggatgaagaa ggcttcttgg agaaggttct gaaaagagat 660  
 acggnattaa agagaaatag aaaagagcac tgacgaagca ctcaggatgg ctattcaagg 720  
 gaattggggg attcacagca actggtgcac aancatcccc aaatgccaag aaaaatgggg 780  
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<210> 4911

<211> 793

<212> DNA

<213> Homo sapiens

<400> 4911

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atcatctcca gaaccagcta gtcttcctgc agaagatatt agtgcaaact ccaatggccc 180
aaaaccacaca gaagttgtat tagatgatga cagagaagat ctttttgcag aagccacaga 240
agaagtttct ttggacagcc ctgaaaggga acctatccta tcctcggaac cttctcctgc 300
agtcacacct gtcactccta ctacactcat tgctcctaga attgaatcaa agagtatgtc 360
tgctcccgtg atctttgata gatccaggga agagattgaa gaagaagcaa atggagacat 420
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acatgttggt tatattgtgc caccaactcc agaaaagagt atagtaggga tgaccaaggg 660
tcaaagtggg gtaaagaaga ctcatcatcc actgagtttt gtagaaaaac ngagaagcaa 720
ctcttgaaag gtatcttcaa agaacagtaa acatccaact ttactacang atcctgaatt 780
taaggnaagt tcc 793

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<210> 4912

<211> 760

<212> DNA

<213> Homo sapiens

<400> 4912

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tttaagacat gaattacatt taaaattaga atatggttaa tattaaataa taggcctttt 60
tctaggaagg cgaaggtagt taataatttg aatagataac agatgtgcaa gaaagtcaca 120
tttgttatgt atgtaggagt aaacgttcgg tggatcccct gtctttgtaa ctgaggtttag 180
agctagtgtg gttttgaggt ctactacac tttaggaag gcagctttta attcagtgtt 240
tccttatgtg tgcgtacatt gcaactgctt acatgtaatt tatgtaatgc attcagtgtg 300

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cccttggttac ttgggagagg tggtagctaa agaacagttg agtataggtt tttctccatt 360  
 tacagatgtc tttggtcaaa tattgaaagc aaacttgtca tggctcttctt acattaagtt 420  
 gaaactagct tataataact ggtttttact tccaatgcta tgaagtctct gcagggtctt 480  
 tacagttttc gaagtccttt tatcactgtg atcttattct gaggggagaa aaaactatca 540  
 tagctctgag gcaagacttc gactttatan gtgctatcag ttccccgata cagggtcaga 600  
 gtaaccata cagtattttg ggtcaggaag agaaagtggc catttacact gaatgagttg 660  
 cattctgana atgtcctatc tcttaaactg agaatanatt tggaaagaca tttgatctta 720  
 aaaccaaagt aantttaaga atgaagtggc atattacata 760

<210> 4913

<211> 728

<212> DNA

<213> Homo sapiens

<400> 4913

gcaagtacac ggagaataag ctgaaggcca tcaaagcccg gaatgagtac ttgctggctt 60  
 tggaggcaac caatgcatct gtcttcaagt actacatcca tgacctatct gaccttattg 120  
 atcagtgttg tgacttaggc taccatgcaa gtctgaaccg ggctctacgc accttctct 180  
 ctgctgagtt aaacctggaa cagtcgaagc atgagggtct ggatgccatc gagaatgcag 240  
 tagaaaacct ggatgccacc agtgacaagc agcgcctcat ggagatgtac aacaacgtct 300  
 tctgcccccc tatgaagttt gagtttcagc cccacatggg ggatatggct tcccagctct 360  
 gtgcccagca gcctgtccag agtgagctgg tacagagatg ccaacaactg cagtctcgct 420  
 tatccactct aaagattgaa aacgaagagg taaagaagac aatggaggcc accctgcaaa 480  
 ccatccagga cattgtgact gtcgaggact ttgatgtgtc tgactgcttc cagtacaagc 540  
 aactccatgg agtccgtcaa gtccacggtc tctgaaacct tcatgagcaa gccagcatt 600  
 gctaagagga gagccaacca gcaagagaca gagcagtttt atttcacaaa aaatgaaaag 660  
 agtacctgga ngggcaagga acctcatcac caagttacaa gcccaangca tgncttttct 720  
 gcaaaaaa 728



<210> 4914

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4914

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accaggaaac tgtcaaagtg caaatacaca gcagagcttc agaatatatc actgatgtcc 60
attcgaatga cctgtctaca ccacagatcc ttccatcaaa tgaagggtgtt aatccacgtt 120
tatcggcaag cctcctctaaa tcaggcaatt tgtggccagg attggcacca ccacacaaaa 180
aagctcagtc tgcattctcca aagagaaaaa aacagcacao gaaatacaga agtggttattt 240
cagacatatt tgatggaaca atcattagtt cagtgcagtg tctgacttgt gacagggtgt 300
ctgtaaccct cgagaccttt caagatctgt ccttgccaat tcctggcaag gaagaccttg 360
ctaagctgca ttcatcaagt catccaactt ctatagtcaa agcaggatca tgtggcgaag 420
catatgctcc acaagggtgg atagcttttt tcatggaata tgtgaagagg tttgttgtct 480
catgtgtccc tagctggttt tgggggtccag tagtaacctt gcaagattgt cntgctgcct 540
tctttgccag agatgaacta aaagggtgaca atatgtacag ttgtgaaaaa tgcaaaaagt 600
tgagaaatgg agtgaagttt tgtaaagtac aaaactttcc ngagattttg tgcattccanc 660
ttaaaaagat tcagacatga actaatggtt tccacaaaaa tcagtaccaa ggtttcaatt 720
tccgnc 726
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<210> 4915

<211> 700

<212> DNA

<213> Homo sapiens

<400> 4915

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gaagttttta tacagccatt gcacaagcat ttttatcaaa tgaaaaattg ccaaattctag 60
agtgtatcca aaatgccaac aaaggcaccc acacaagttt aatgcagaga ttaaggaacc 120
gaggagagag agaccgggaa agggagagag aaagggaat gagggagggt agtggtttgc 180
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gagcaggttc tcggagggac cgggatagag actttagaag acagctttcc atcgacacta 240  
 ggcccttttag accagcctct gaagggaatc ctagcgatga tcctgagcct ttgccagcac 300  
 atcggcaggc acttggagag aggctttatc ctcggtgtaca agcaatgcaa ccagcatttg 360  
 caagtaaaat cactggcatg ttgttggaaat tatccccagc tcagctgctt ctccttctag 420  
 caagtgagga ttctctgaga gcaagagtgg atgaggccat ggaactcatt attgcacatg 480  
 gacgggaaaa tggagctgat agtatcctgg atcttggatt agtagactcc tcagaaaagg 540  
 tacagcagga aaaccgaaag cgccatggct ctaatcgaag tgtagtagat atggatttag 600  
 atgatacana tgatggtgat gacaatgccc ctttggttta ccaacctggg aaaaagaggg 660  
 attttaatac cnccaanggc ctgggcaagg aacacagaaa 700

<210> 4916

<211> 668

<212> DNA

<213> Homo sapiens

<400> 4916

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 tacattaagg gtgaaaatag caatacagta gatttgaata ccttgatgtt ttgcattact 120  
 tcatttatgt ttacatcatg tttagaaatg ttttcattta ctgtggtctt tggtcacttc 180  
 agctcaaaga cctagtgatg gatatttctt tgaggctttc atttatataa ttttattttg 240  
 tacaatgttt tttttaaatg tgcaaatact gtattcaagt gaaaaaaata cagtatttgt 300  
 agataacat agctactaca cagttcttcg gtagtcccag tgtagttata tcagtgttta 360  
 ctgaaggga catcaaaata ttaatggtat attataaaat aaagactttc ttaaaggaaa 420  
 attgcaccta ttttaccttt ttaagagtaa gccatgaaat cttgtaacat gtctcttaac 480  
 tatttataat gaaaagtggc atttgggtat agtcaccaca gcantgttct anatecctaa 540  
 gattatctag gtaggacatg tcaaagatga cggttgtcat tctggaggcc ctattatgag 600  
 aatattataa aagggtgncc ttgtangaag gatcttgngt cctccccctg aggttctctt 660  
 tttcttgg 668

<210> 4917

<211> 724

<212> DNA

<213> Homo sapiens

<400> 4917

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aaaactatTT gagacataaa cagttgtgtg atgtaatTTT agtcgctggt gatcgcagaa   60
ttccagctca cagattggtg ctctcctctg tctcagacta ttttgctgcc atgtttacta  120
atgatgtcag agaggcaaga caagaagaaa taaaaatgga aggtgtagaa ccaaattcgt  180
tgtggtcctt gatccagtat gcttatacag gccgccttga attaaaagaa gataatattg  240
agtgcctggt atctacagct tgccttcttc agctttcaca ggtttagtaa gcatgctgta  300
agtttttaat gaaacagctt catccatcca actgtcttgg aattcgttct tttgctgatg  360
cccaagggtg tacagatttg cataaagtgg ctcaacaatta tactatggag catttcatgg  420
aagtaatcag aaaccaggaa tttgtattat taccagccag cgaaattgca aagctcttgg  480
ctagtgatga catgaacatt cctaattagg agacaatatt gaatgcactt cttacttggg  540
tccgtcatga tttggaacag agacggaaag atctaagtaa acttttggct tatattaggc  600
tactcttctt gcaccacagt tcctgggcag acatgggaaa taatgtacnt tttcgggatg  660
atatagatgt cagaaactca ntatgggagc aatgaaatac catttattac cagagagAAC  720
cgan                                                                    724

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<210> 4918

<211> 732

<212> DNA

<213> Homo sapiens

<400> 4918

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aaaaaataaa agatttcatt ttatgtgagg aattatTTTa ataaaaaaaa gagggtttat   60
gctctatagt aataaaatTT accagtaaca cccaatcaga aaattttggt tccttagtat  120
ttagggaaga cttttgtctc ttatggaatt ttacatgttt tgatttagaa aagtagatgc  180

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aatataatat atttcaagtt ttatacatat tagatgaatt gcatggtatt ttaggcaact 240  
 taactataaa caaatattatt catagaagca ttgttgccaa caatttagat gacctcgatg 300  
 aaaaaacaca ccaattgaca aaactggctc aaaaggaaat aaaaaatcca aacagacctg 360  
 taacaagtaa agagattgaa ccagtaatca aaaatctccc aacaanagaa agtccaggac 420  
 taaatgagtt tactggcaaa ctatgccaaa catataaaga agaattaaca ctaatccttc 480  
 tcgaactctc ccaaaaaatg gaagagaaag gagcacctcg tgacattcta taaggcggac 540  
 attaccttaa caccaaagcc agacaaagac ctcacaggga agctacagac caatatecct 600  
 tatgaatata gatgcagaaa aacttcaaaa tactagcagg ccaaateccag cagcttatta 660  
 aaaatgtcac acaggcanga ccaagtgaga tttatcacgg aaatgcaggg gatggncttc 720  
 atacaaaaag tt 732

<210> 4919

<211> 811

<212> DNA

<213> Homo sapiens

<400> 4919

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 tatgatagcg actggaaccc cactgtggac cagcaggcca tggacagggc ccaccgctta 120  
 gggcagacaa agcaggttac tgtgtaccgg ctcatctgta aaggcaccat tgaagaacgc 180  
 attctgcaaa gagccaagga gaagagttag attcagcgga tggatgatttc aggtgggaac 240  
 ttcaaaccag ataccttgaa acccaaagag gtgggttagtc ttcttctaga cgacgaagag 300  
 ttggagaaga aactgaggct gcggcaggaa gagaacggc aacaggagga aaccaaccga 360  
 gtgaaagagc gcaagcgga gcgggaaaag tatgcagaga agaagaaaaa agaagatgaa 420  
 ttggatggga aaaggagaaa agagggtgtg aacctggtga tcccatttgt tccctcggct 480  
 gataactcca acctctctgc tgacggagat gactccttca ttagcgtgga ctcagccatg 540  
 ccaagccctt tcagttagat ctccatcagc agtgagctgc aactggctc cattcccctg 600  
 gacgagagca gcagttagat gctgggtcatt gtggatgacc cagcctcctc agcccctcag 660  
 tctcgagcta ccaactctcc cgcatccata acangctccg tctcagatac cgtgaatgga 720

attccattca ggaaattinca actgcaggac ttggtcactc aaccccgaaa gccgaaggcc 780  
gccccaaang gtcaagaaan cacaagccaa a 811

<210> 4920

<211> 851

<212> DNA

<213> Homo sapiens

<400> 4920

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caatgcttct gctgtagcta gaaaaaagtt attacataat tctgaagatg aacagagctt 120  
aaagtcagaa attgaagaag aggagctaaa agatgaaaat caactattac cagtgtccag 180  
ttctcacact gccagagca atgttgatga atctgaaaac agagactcag agtcagaaag 240  
tgatttgagg gtagcccgga aaaattggca tgctaattgt tacaagtccc atactccagc 300  
accttcaaag acaaaatttc ttaaaataga gtcttctgag gaagactcta aaagtcatga 360  
ttcagatcat gcatgtaaca gaactgctgg cccatcaacg tctgtgcaga aacttaaggc 420  
agagagcatc tcagaggaag cagattctga accaggaaga tctggtggta ggaaatacaa 480  
tacatttcac aagaatgcga gtttctttaa aaaaaccaag attctgagtg actcagaaga 540  
ctctgaatct gaagagcaag atagagaaga tgggaaatgt cataaagtgg aaatgaaccc 600  
aatttcagga aatctgaact gtgaccctat tgctatgtcc cagtgttctt cagatcatgg 660  
atgtgaaact gatttagatt cagatgatga caaaatagaa aaaccaaaca attttatgaa 720  
aagattctgc atcacaagga catggactaa gcagaaaaat ttccaaggaa aaagggtctg 780  
ttccagtgac tcagacagtt antttacagg gnggttaaga aatcatcaaa agccagaaca 840  
aggtcncctg a 851

<210> 4921

<211> 805

<212> DNA

<213> Homo sapiens

<400> 4921

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atgggtccag ccaagcattt gctagtgtgg aagaagcatt gcatgcattt attcagccag 120  
agatttctgga tggcccaaat cagtattttt gtgaacgttg taagaagaag tgtgatgcac 180  
ggaagggcct tcggtttttg cattttcctt atctgctgac cttacagctg aaaagattcg 240  
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aactagatat gagtactttt attgatgttg aagatgagaa atctcctcag actgaaagtt 360  
gcactgacag tggagcagaa aatgaaggta gttgtcacag tgatcagatg agcaacgatt 420  
tctccaatga tgatggtgtt gatgaaggaa tctgtcttga aaccaatagt ggaactgaaa 480  
agatctcaaa atctggactt gaaaagaatt ccttgatcta tgaacttttc tctgttatgg 540  
ctcattctgg gagcgtgct ggtgggtcatt attatgcatg tataaagtca ttcagtgatg 600  
agcagtggta cagcttcaat gatcaacatg tcagcaggat aacacaagag gacattaaga 660  
aaacacatgg gnggatcttc aggaagcana gggatattaa tcctagtgtt ttcgcaaagt 720  
tccacaaaat gcatatatgc cggatccaat agactggaag ggntcaagcc aggaaatgca 780  
aantttctag aaagtgggng gaatt 805

<210> 4922

<211> 509

<212> DNA

<213> Homo sapiens

<400> 4922

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cgtatgttct ttttaaattg atctgtagac ttaataaaat tccaattaga atccaagcag 120  
gatttgttct tatagataag ctcatatga aatgtatatg gaatgtaaag gaactagtgc 180  
tatggtttgt cccacacaaa tctcatgttg aaatttgatc ctcatgtgtg tgggtgttggg 240  
aggtggggcc tagtgggagg tgtttgggtc atgggtgttg atccctcatg aatagatgaa 300  
tgcccttcct cgtgggtaga taagtgagtt ctagctcttt caggtcccaa caagagctgg 360

ttgtgaaaaa gagcctggca cgcccacttg cctctgctcc caccctgtgg tctctgcacg 420  
tgccagctcc cctttgcttt ccaccgtgag gggaaatagc ctgaanccct cactggatgc 480  
ccaatcctga actttcccaa ccagcanna 509

<210> 4923

<211> 682

<212> DNA

<213> Homo sapiens

<400> 4923

agaagatgct tcaaattcaa cccgagaagg atatcattgt agagtttatc aaaaatggag 60  
atttcaagta tgtccgcatg ctgggggcac ttacatgag gctgacaggc actgcaattg 120  
attgctacaa gtacttggaa cctttgtaca atgactatcg aaaaatcaag agccagaacc 180  
gaaatgggga gtttgaattg atgcatgttg atgagtttat tgatgaacta ttgcacagtg 240  
agagagtctg tgatatacatt ctgccccgac tacagaaacg ctatgtatta gaggaagctg 300  
agcaactgga gcctcgagtt agtgctcttg aagaggacat ggatgatgtg gagtccagtg 360  
aagaggaaga agaggaggat gagaagtgg aaagagtgcc atcacctgat caccgccgga 420  
gaagctaccg agacttggac aagccccgtc gctctccac actgcgctac aggaggagta 480  
ggagccggtc tcccagaagg cggagtcgat ctcccaaaag gagaagcccc tcccctcgcc 540  
gagaaaggca tcggagcaag antccaagac gtcaccgcag cagggtcccga aatcgggggc 600  
acagatcccg ttccaantcc ccaggtcatc accgtngcac agacacagga gccactcaaa 660  
gtctccccga aaggtccaan ga 682

<210> 4924

<211> 693

<212> DNA

<213> Homo sapiens

<400> 4924

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 agctggagat taatgggcgg aacaatctga ttcaacagaa gactgccgca gccatgttcg 180  
 cccagcagat gcagcttatg ctccaaaacg ctcaaagtgc atcacttggt tcttttcccta 240  
 tgactccatc aattccagct aatcctccca tggctttcaa tccttacata ccacatcctg 300  
 ggatgggcct cgttcctgca gaacttgtac caaatacacc tgttctgatt cctggaaacc 360  
 cacctcttgc aatgccagga gctgttggcc caaaactgat gcgttcagat aaactggagg 420  
 tttgccgaga atttcagcgt ggaaattgta cccgtgggga gaatgattgc cgctatgctc 480  
 accctactga tgcttccatg attgaagcga gtgataatac tgtgacaatc tgcattggatt 540  
 acatcaaagg tcgatgctcg cgggagaaat gcaagtactt tcctcctcct gcacacttgc 600  
 aagccagact caagggangc tcctcatcag atgaaccatt cagctgcctc tgccatgggc 660  
 cctgcagnct ggganactgc aactgatacc aaa 693

<210> 4925

<211> 719

<212> DNA

<213> Homo sapiens

<400> 4925

ttgcttgagt catcttctga agcttttaaaa acaattgatg aattggcctt caagatagac 60  
 cttaaatacga catcacatgt gaataattaca actcggaact tggctctcag cgtatcatcc 120  
 ctgttaccag ggacaaatgc aatttcaaatt tttagcattg gtcttccaag caataatgaa 180  
 tcgtatttcc agatggattt tgagagtgga caagtggatc cactggcatc tgtaattttg 240  
 cctccaaact tacttgagaa ttttaagtcca gaagattctg tattagttag aagagcacag 300  
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tctgatggga ccttccaaga agtgnctcac agttagatgc aagaaacact aaagtcctca 660  
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<210> 4926

<211> 811

<212> DNA

<213> Homo sapiens

<400> 4926

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gccagaaagg gctattgcaa gacacgaagt ccgagaaatt gagcagcgac atacaatgga 180  
tgcccctcgg caagatgcc a ttttagatga ggaagaggac atggatgatca ttataacag 240  
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tcaggtgcgc tttgtaaaga atataacttc ctggaaagag atgaaaccag gattttatca 420  
tggaacggtt tcttacttgg attttgcaa atttggtgtg aagaagaaac caatttacat 480  
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atgtgtagca gaagggtggc cagactgtgc tccagagaag ctctggcttc aaatcccgtt 660  
cttctgtggn catagctccg aatgctggaa tgtgggaaac angtgggcta tgggtnaagc 720  
caagttaaac ctaaataatg aataatttct ggtgggagtt actgaagaac ttgaagattt 780  
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<210> 4927

<211> 750

<212> DNA

<213> Homo sapiens

<400> 4927

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 agttgtccaa agccatgata atgatatctc ttacaaattg acttctgtaa cccccctaga 180  
 aataaccctt ttccttattt gatttttagtc atcaaacata gtatgatatg ggaaaagtca 240  
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 ggttttattc atttatctcc tcctattttg aggggacaac atgggtagtt aaatctttgt 480  
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 ccaaaaccaa tgcctgccaa acaaaatctt agacatccca atataatatg ttagttatat 600  
 ttccattcac atcattattg aaaataccca gctcagtgcc tggcttaata aatgtttaat 660  
 tcccttacct actcctgctc cattttttta attgaaatgg gagatgagca aantancaca 720  
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<210> 4928

<211> 759

<212> DNA

<213> Homo sapiens

<400> 4928

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 tgctgtctct ccgctccgcc accccgaacc cgccaaggctc ctgtcctttt cctcctgtcc 180  
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 ggcgtcctc ttcaagaaga aaaccgtgga tgatgtaata aaggaacaga atcgagagtt 300  
 acgaggtaca cagagggcta taatcagaga tcgagcagct ttagagaaac aagaaaaaca 360  
 gctggaatta gaaattaaga aaatggccaa gatttgtaat aaggaagctt gcaaagtttt 420  
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agttacttct atgtctacac aaacaaaagt gatgaattcc caaatgaaga tggctggagc 540  
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attacanaca atgcagaatt tccagaagga aaacatgaaa atggaaatga ctgaagaaat 660  
gatcaatgat acacttgatg acatctttga cggttctgat gacgaagaag aaagccagga 720  
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<210> 4929

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4929

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cagatacatc acaattatac tagaagattt caacaccctt ttagcaatag ttgatagaat 180  
agttagaaaa ttagtaaagt tataaaaggc ttgaacaata ctatcaacca acctgacctc 240  
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gatcatggct cactgcagct tcaacctctc aggttcagggt ggTTTTTcca cttcagcctc 360  
ccaagtggct gagagtacag gcatgcacca ccatgcccac ctagctTTTT aatTTTTTgt 420  
ggagactggc tcccactatg ttaccaggt tagtttcaaa ctctgggct caggtgatcc 480  
tctgcattg gtctcccaaa gtgctgggat aataggtatg aagcactgtg cctagccaac 540  
ctgacttaat tgatatgtat agaacatgcc accaacagca gaatatacat tctcttcaag 600  
gtacacacag aacatttagt aaggataggc attctgaatt ataaaatata tctcagtaga 660  
tttaaaggac ttaaatacaag gtccccngac nacaggtgaa attaaatttt ggggatnaag 720  
ta 722

<210> 4930

<211> 455

<212> DNA

<213> Homo sapiens

<400> 4930

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 gcccaccgc cccgggagct cgcctccccg gtgctcccc gccctcccc cccccccagc 180  
 ggcgctgcct cctccaaatg agcgattcgc ccgctggatc taaccaagg acaccgaaa 240  
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 tcttgccacc ggcggaaccc ctgcgccagg gcgaaccggc tcccgatcag ggtcctgaag 360  
 atgctgagcg ctacaccgg tcacctctg caccngagt acctgcagcc gctgtcntcc 420  
 actcccgta anccattga actggacgcc aagaa 455

<210> 4931

<211> 733

<212> DNA

<213> Homo sapiens

<400> 4931

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 gggggccct ctgaagcggc ccaggatcct gcacatggcg ctgaccgggg cctcagaccc 180  
 ctctgcagag gcagaggcca acggggagaa gccctttctg ctgcgggcat tgcagatcgc 240  
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 gctggacagc cctccctgc ggctggacac cccatcttc gtcaccttct accagtgcct 360  
 ggtgaccacg ctgctgtgca aaggcctcaa gcgctctggc cgcctgctgc cctggtgccg 420  
 tggacttccc cagcttgccg ctggacctca gggcggcccg cagcgtcctg cccctgtcgg 480  
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 tctacaatgt gggccgctca ctaccaccg tcttcaacgt gctgctctcc tacctgctgc 600  
 tcaagcagac cacctccttc tatgccctgc tcacctgcgg tatcatcatc cggggggcctt 660

ctggcttggt gtggaacaag nagggggcaa aanggaaccc tgtcntggct gggcaccgtc 720  
ttcggcgtgc tgg 733

<210> 4932

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4932

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gatgcagtgg aataacaatg tttacaggta ccgatccga tccctgctca atgtagcatt 120  
tttttggttt tattttctta ataaaagcag gggtaggttt ctttaaactg cacaaacatg 180  
caaggatttt ttaaaaatgg aaacttctct catgttattc aactagagca cttcagtitta 240  
caaaacagca agtccatctt tatggaagcc agcacaagga actgtgtgca aataatgaag 300  
acgcttgctt ggatcctggt tcaaaattct agaccagggc taccttacac agaattgggc 360  
atgttactgc caggagattt ctgtgtaact tcatttattg gctacagttt tggcatttga 420  
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aaagcctang atgttgccac tcaatgggtt tacattctgg gacatctttt aagttgtttg 600  
tagcactgca gttcaaaagt gttaatattt aaagggactt ctagatttta tacctaagtc 660  
agtagaacct tgaagtatat taagcttttt tgntaaanct tgaacaagtt gggnaagaat 720  
aatggtgagt tccc 734

<210> 4933

<211> 858

<212> DNA

<213> Homo sapiens

<400> 4933

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 gtaacaagaa tgggcaggat accaaggaaa cagactaatc aggcatatgg tgactatttt 180  
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 tattggtctt ttaaaatttc ttaatcattt tgaaatgaat tgatttttaa attgaataaa 540  
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 gaacaacatt tttttgtaaa aaaacagaag taaaaaaaca tcctagcagg aaaccaggaa 660  
 cgggataaaa acacaaaaag gtatctcggg cacaatgccc tgaaggnaaa caaccatggc 720  
 caagaacatg agggtaatgg ccagggnata agaaaacacc cctgggggtg ggatcccttg 780  
 acaactcctg attcctaagg ntcaattagg gggattgggtg caaaaaaaat ggtaaanggt 840  
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<210> 4934

<211> 784

<212> DNA

<213> Homo sapiens

<400> 4934

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 gaagcttggg aactaatagt tttagagttt taagatacca cgtttttagta taacatttac 180  
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gcctcccaaa gtgctgtgat tacaggtgtg agctgctgag accagccttt tcttttaatt 480  
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 tgctgtcaat tttttgtctt tctactgggc ttttcaacct tgggtattca tggatcacc 600  
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 ttggggaatg tggtaaaacc ggggaggtat atttgacttt gnccaagtta tccgcatgag 720  
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<210> 4935

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4935

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 tcgtcctttc ttgcggccca gggagaccag gcctttcatt ctgggctcga gaccaacaat 240  
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 tacctggacc tgcgggatag cccacatgct ggagggtcgc gagaagaacc tgcactttgt 660  
 ccatatggtg tacacaaagg ggctggtgga ggacacactc acgggaaatc tcggagtggc 720  
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<210> 4936

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4936

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tttgtagcta aaacacaaaa naagaaacac tcaaatccag ctgctttgtc aattgtcagt  660
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<210> 4937

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4937

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aggcttcctt cctaagcctc tctgtgaaac tctttgaaaa ggggtatgtg ggctagcttg  180
caaggacagc cagaaggag aaggatcaca tccccctccg tggccaggct ctgagagaca  240

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gaaatccagt gaaggacaga gcatggggct gagtgtctgt agcccactgc attgagggca 300  
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<210> 4938

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4938

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 tccagagaag atgcaaccaa gacagatgca gaatcagact gccagggtgt tgcttcggtc 180  
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actaagtn

788

<210> 4939

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4939

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 tgaaggctac aatgtggaag tccgagacag agtcaagtgc ataagtgggg ttgaagggtgt 180  
 gccattatct acacaatggg gacctcaagg ctatttctat ccaatccaga ttgcacagta 240  
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<210> 4940

<211> 702

<212> DNA

<213> Homo sapiens

<400> 4940

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<210> 4941

<211> 572

<212> DNA

<213> Homo sapiens

<400> 4941

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 ataatanaaa ggtgatgaag gattcggctc cggaactgaa tgtgagtagt tctgaaacag 540  
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<210> 4942

<211> 587

<212> DNA

<213> Homo sapiens

<400> 4942

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tttcagtggc cancagccca cactgcccac ggctgatact gtggaccccc tggactggct  540
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<210> 4943

<211> 684

<212> DNA

<213> Homo sapiens

<400> 4943

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tatataaaca aacccaaatt atttcttcaa atcaagaact tatctacgaa gggcgacgct   60
tagtcttaga acctggaagg ctggcacaac atttcctaa aactactgag gaaaacccta  120
tattttagt aagccgggaa cctctgaata ccataggatt aatatatgaa aaaatttccc  180
tccctaaagt acatccacgt tatgatttag acggggatgc tagcatggct aaggcaataa  240
caggggttgt gtgttatgcc tgcagaattg ccagtacctt actgctttat caggaattaa  300
tgcgaaagg gatacgatgg ctgattgaat taattaaaga tgattacaat gaaactgttc  360

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acaaaaagac agaagttgtg atcacattgg atttctgtat cagaaacatt gaaaaaactg 420  
 tgaaagtata tgaaaagttg atgaagatca acctggaagc ggcagagtta ggtgaaattt 480  
 cagacataca caccaaattg ttgagacttt ccagttctca gggaacaata gaaaccagtc 540  
 ttcaggatat cgacagcaag attatctcca ggtggatnac tggcagacgc atgggcacat 600  
 caagaaggca ctcatccgaa agacagaaat gtanaaaaac tacaagtcct gttaaattgc 660  
 atgaccagag antttactaa ncag 684

<210> 4944

<211> 826

<212> DNA

<213> Homo sapiens

<400> 4944

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 aagaaataat ggaaagccaa gaatttattg ttctatatac tcatcaaaag atgaagaagt 180  
 caaaagtgtg gcaagatgga attctgaaga tcaactcactt aggaacaaaa gcaattttat 240  
 atgatgacaa aggagcatgt ttggagagtc tgtttcttaa atgccttgag gtgaaacctg 300  
 gagatgactt agaaagtgat cgatacttaa tcacagttga agaggttaaa gttgctggag 360  
 ccataggtat tgtaagcag aatgtcaata aagaagcacc agagttaaat tcaaggacat 420  
 ttatatcttc tggccgatct cttggatgtc agccctcttg cttaaaaagg aagtttactg 480  
 gttttcaagg accacgtcag gttccaaaga aaatggttat tatggaaagt ggtgaatcag 540  
 ctgcatcaca tgaggctaag aaaactggcc ctactatattt ttctccattc tgcagcatgc 600  
 ctcttttggt tcctactggt ggcaagaaaag atgtaaataa tatactggca aaccctgaga 660  
 acatgtgact tacaagaaca gggagagaaa tgccatgggt ttttcctcgg gtttttcccc 720  
 aaacccttcc aagatttaac cccaaaaaag tgcctgggggt ngaaagaaaa aattattttt 780  
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<210> 4945

<211> 723

<212> DNA

<213> Homo sapiens

<400> 4945

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tgcaaattatt ccaaagacat gattgtaagc ctttgttccc tgtaaaagat tgctctgtat   60
taaaacaaat ccaccaaaaca acaagtcata gaccogttag aaaccagcat tctaaagcat  120
ggtttaagtg tgaacagggtg tttgtagctt atctgagact gacagtaggt aaaggggcca  180
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gaggaagaca ttattatac agagtgattt attgcaattc ttagctactc catcaagcta  300
gacttgtcac catgtcccat taaaagggtt taagaagaat tctttctcag aatcctgcat  360
tacagtagca tctgcaataa ggagaaaatt ttcttctggg aatcactcca ggaaaccttg  420
accatcctc tacttagtca ctcttataga gccctgcatt ttcttttgta gcatttatga  480
catgtgtaat gttacatttg tttgtgggat tatttaagga atgtctgtca tgtgagacaa  540
ataagcttta tgaagtacag gcacctcttc tgtcttaatt cctatgcccc aagcacagtc  600
cctgacatct agtanacctt caaaaagttt tacggaatga atgagtgaac aaatgatgca  660
aagtgttggg tgcaggatat ctctctcaag tcttccaant ccttaaggag atnagaggca  720
ana                                                                    723

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<210> 4946

<211> 748

<212> DNA

<213> Homo sapiens

<400> 4946

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agactgagct cagtagccag gcatgaaaga gactgggcaa gttgcagggg ctaattggaa   60
aggggctgtc ggttgcactt ggggtttaa caagaggttt cttttgcaat gagaattttt  120
agggtggctaa gatcagtcctt ctgggcaaaa aaataaacta agcatagagt gcagttggat  180
atgaccgagg aaattacaaa aagggtcca ggagcaaagt ctgagcttct cttatcagtg  240

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ttgcagtgga atagctgggg gcctgatgct gtttgtgctg atcatacttt gcaaagtccc 300  
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 cggccttact ttgttttcat agcagcaaga attgaagact taagggtttg agcagatggt 420  
 tttctaccta aattgaataa ttcaattacg tattctcaac tagcatggat ttgggtcatg 480  
 gaattaaagt agaaacgtat ccggcatgac ttctttgtgc ttatcaaaag tgatcctgat 540  
 aaacagatct tgctctttca tgtaaagaag taaaagttat ttatgattcc atctgatata 600  
 cataggagag aaactgatan aagaattctg aagggaact gtatgataaa aagctatata 660  
 aagtccaagt gtncaatttc cttcaaccat aattttgagc aaaccaagg atttaaagtc 720  
 cnnggggaac ctgaacaatt taatttgg 748

<210> 4947

<211> 560

<212> DNA

<213> Homo sapiens

<400> 4947

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 tgaactgaag ctagcttatg ctgttcgagg caataaattg gaaagaggcc agaagatcag 120  
 tgagcagatt gtcattggca cccctgggac tgtgctggac tgggtgctcca agctcaagtt 180  
 cattgatccc aagaaaatca aggtgtttgt tctggatgag gctgatgtca tgatagccac 240  
 tcagggccac caagatcaga gcatccgcat ccagaggatg ctgcccagga actgccanat 300  
 gctgcttttc tccgccacct ttgaagactc tgtgtggaag ttgcccaga aagtgggtccc 360  
 agacccaaac gttatcaaac tgaagcgtga ggaagagacc ctggacacca tcaagcagta 420  
 ctatgtcctg tgcagcagca gagacgagaa gttccaggcc ttgtgtaacc tctacggggc 480  
 catcaccatt gctcaagcca tgatcttctg ccatactcgc aaaacagcta gttggctggc 540  
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<210> 4948

<211> 710

<212> DNA

<213> Homo sapiens

<400> 4948

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aggcctcaga aagatggcgt cctcggagca ggcagagcag ccgagccagc caagctctac   60
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acagaattcc cgggtccgcc agagcccact tgcaaccagg agagcattcc taaagaagaa  180
agggctgaca gatgaagaga ttgatattggc tttccagcag tcgggactg ctgccgatga  240
gccttcgtcc ttgggcccag ccacacaggt ggttcctgtc cagccccctc acctcatatc  300
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ggcaggcatt gcatttggct ttcaccagct ctacaagaaa tacctgctcc ccctcatcct  420
gggCggccga gaggacagaa agcagctgga gaggatggag gccggtctct ctgagctgag  480
tggcagcgtg gccagacag tgactcagtt acagacgacc ctgcctccg tccaggagct  540
gctgattcag cagcagcaga agattcagga gcttggccac gagctggncg ctgccaaggg  600
caccacatcc accaactgga ttctggagtc caaaatatac aacgaactca agtccgaaat  660
tactcentga aagggttct tttaatccgn gganttcctc catcccatca   710

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<210> 4949

<211> 648

<212> DNA

<213> Homo sapiens

<400> 4949

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agacttaaca agctgcagat aaccatgtgg acttctgtca taattcttgc tgagtcaaga  180
gtgtaaataa aagaaatggc aggactcata ttattcagtt gtacccaagt atttaaaaat  240
gactctctta agccttaaaa agtcatagat ttgtgctgct gccagaatta tattaattat  300
tattaatgtt attattagaa aaaaaatttc tggagtgaga gtaaagaggc ttaattagtt  360

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tgtgggcagt tttcatatgc tctgtgaaat gtgtccggat gtgacatagt tttttttttt 420  
aatatgtgga aatgtcttct cttcccatte ttttctccta aaatcatata tactgtaata 480  
tatgctctct cacctctatt acctcctcac atctaccctt tcccangtta ggtttgcttt 540  
ttgacaaaa agataaaaa taccaaggta tggcaagttg tgaagacagc acattaaaac 600  
atacctaant tcacagtatt cctgtcacna cngaagtggt agtattca 648

<210> 4950

<211> 823

<212> DNA

<213> Homo sapiens

<400> 4950

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cgcgaggcg gcggccaggc cgagaggcag gccgggcagg ggtgtcggac gcagggcgct 120  
gggccgggtt tcggcttcgg ccacagcttt ttttctcaag gtgcaatgaa agccttccac 180  
actttctgtg ttgtccttct ggtgtttggg agtgtctctg aagccaagtt tgatgatatt 240  
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gagaccactg tggagttgga agggcaggat gaaaaccaag aaggagattt tgaagatgca 420  
gatacccagg agggagatac tgagagtga ccatatgatg atgaagaatt tgaaggttat 480  
gaagacaaac cagatacttc ttctagcaaa aataaagacc caataacgat tgttgatgtt 540  
cctgcacacc tccagaacag ctgggagagt tattatctag aaattttgat ggtgactggt 600  
ctgcttgctt atatcatgaa ttacatcatt gggaagaata aaaacagtcg ccttgcacag 660  
gcctggttta acactcatag ggagcttttg gagaacaact ttactttaat ggggggatga 720  
tggaactaac aaaagaaacc acaagcacia ggaaaattta accaangang aatgagcaa 780  
aatccaataa acctgttggg ggttcnggt ccaaattttc ccg 823

<210> 4951

<211> 595

<212> DNA

<213> Homo sapiens

<400> 4951

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 gctcgcagcc tccccagcgc agcagcccgg ctgtgggcct gcggcagccg ggtcttcctg 120  
 gtccccacct cctggggccg acgggcggca ggaaggggct cggcgggacg cgccgtcagg 180  
 gacctgagga ggaacaacgg aacgcgttcg gaacggcctg gactcccag actcaccga 240  
 ctctgtggcca caccgggaga actgaagcgg cagtagccgg cggagacgcc cgacccgaag 300  
 gccggctgct atggagcaga cagctgaacc gcttgccaga cgccgaaacc cagtgcagcc 360  
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 atgcgccgcc tgtcctggag gggcccattt ccttccgtcg tggggggaag gcacagtgag 480  
 tccactgggg cacggcagcg tctaagccac aagcccgagc acataagcca agtcctaacg 540  
 ngagcctatg ttgtaagtcc actactggtg caaggtttca anacttctaa agaan 595

<210> 4952

<211> 704

<212> DNA

<213> Homo sapiens

<400> 4952

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 tgggggtcat aggatagtag aatggccaac atctcaattt agacatgtta cttcctgctc 180  
 taaatacact tgtggacgct acttgtggtg taactcctta tgtatttaat aattatctga 240  
 ctctggtttt cttggttgat ttttttaa ggggtgaagaa tctagttatg aattccttgc 300  
 cctttatgga atgtgatatc ttggttttta ttccatctgt tacttccctt ttacttaatt 360  
 ttatcttatt gttttgcgtt gtgtttctaa aataatggct ttggcttggt ttttcctgaa 420  
 tgtttctgca gtttggtttg agtatctggg tttgggcacc actcctgaac ttggactcca 480

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 gaaagcagtt aaagcagttc tgtgggggtct cancaagatg gactcaaaag ttgtgggatg 660  
 aaaaaaacta anggacctca atanttgacc aagaccaata ggaa 704

<210> 4953

<211> 756

<212> DNA

<213> Homo sapiens

<400> 4953

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 ggaaaagacc gctgacttca gaaacagcgg gaaccccagc tcgtcaccgg taattcaaga 180  
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 ccaagcctga ttcaaaatan gctggagcaa ggaggagcaa caaacataac attcccaagt 660  
 ttacagctga aggaaattaa gcttcaaagt tgcccaagtt tananaatga agtcaatggg 720  
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<210> 4954

<211> 695

<212> DNA

<213> Homo sapiens

<400> 4954

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agcattgtgg atgatgtgtt ttcagatttc cagggtgaagt tctgacccta cctgtttggc 360  
caaagacgta aattgagagg aaaggccttg gtcttcctga tcaaccagca tttaacgaac 420  
agtggcttaa tgcagatcac tcaagaggca gcatagcaat gtaaaaggaa tataagtang 480  
tgttgatgc ctttttccta gaccaggaat ggggaatata taacacctgt gccaccgctc 540  
ttttanggag gcattatgaa tgagtgcagc attcctgtcc tctgtgccag gatttggnc 600  
tagaatccat gtcagattgg ngcttcaga catctattcc cagtccatca nagtgaaatg 660  
aaggctattt gccatccctg ccttagacag aggag 695

<210> 4955

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4955

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taatttacct ctttaagacat tagaaagtat tgcatttggt ccaccgcagt ccgacctaa 120  
taattcatta ggaactccat cagtgcctcc aaaagctcca gttcagaaat tcagctgcc 180  
ggtcgaggga tgtactcgaa cctataattc ttcacagagt attgggaaac acatgaagac 240  
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agctaacaac ttaaatacac caaataatgg aaagtttggt tattttttgc catcaccggt 360  
gaacagctca aatccatttt ttacgtcaca gaccaaagcc aatgggaatc ctgcttggtc 420  
ggcccagttg cagcatgtct cgccacccat ttttcagct catttagcaa gtgtgtcaac 480

tccattgttg tcctcaatgg aaagtgtcat aaatccaaat ataacttctc angataaaaa 540  
tgaacaaggt ggtatgttat gttcccaa at gggaaattta cctagtactg ccttgccagc 600  
acaaatgggg ggatctaacc aaaacagttc tgcctttgaa tattgacaag tggctcaaga 660  
tcctttcctt ccttttacct ggcangaaag gtaggtcaaa tggctctctc tttcccttca 720  
accaagcaag attagtgggg gacctaaant tccggttttt tttccccaan ctgggg 776

<210> 4956

<211> 720

<212> DNA

<213> Homo sapiens

<400> 4956

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ccggcgccgg gggacagagc cccttttttt ttttttgccg aaagaccctt tctgctgggg 120  
agcctcttgt gtccagccta ggcccgcgtg cagcgccgac ggatgatcgt cttcttgga 180  
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ggaaaatcaa aatccaatga ttctgaggaa ggccttgaag atgctgtgga aggtgctgat 300  
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accaacatgg ctctagccca tgaaattgta gtaaatggag actttcagat taaaccagtt 480  
gaattaccaa gnaaacagct tgaagaagag agtaaaggag attgtacata aagcgTTTTG 540  
ggattgcttg aagtgtgcag ctaagtgaag attccccaac atatgaccat gctatcaaac 600  
ttgtangaga aatcaaaaga gactctccta tctttccttg ctgcctggtc atactagact 660  
gagaaaacca gntaacaaga agtcctggat ctgggattct gataaagcag gaagcaanan 720

<210> 4957

<211> 535

<212> DNA

<213> Homo sapiens

<400> 4957

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 caaggcaaga ctgctgctgt agccaatagt atgaactatc tgacaaagaa aggaatgtcc 120  
 tccaaggaaa tctatgatga ttcttttatt aggccagtaa ctttttggat tgttggggat 180  
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<210> 4958

<211> 718

<212> DNA

<213> Homo sapiens

<400> 4958

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 tgaagacctt ttgccagaac agtgcattga agattcattc caaaaagtga tactgagaag 180  
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 gtgtaaggat caaaaagaaa tttataatgg acttaaccaa tgtttgtcaa ctctacctag 300  
 caaaattttc ccatataata aatgtgtgaa agtccttagt aaatcatcaa atctaaatag 360  
 agaaaacata agacatacta cagagaaact tttcaaatgt atgcaatgtg gcaaagtctt 420  
 taaatctcac tcaggccttt cttatcataa ggataattca cactgaagag aaactctgca 480  
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 ttcacactgg agagaaacca tacaaatgtg aagaatgtgg caaagctttt aactggggct 600  
 cgantcttac taaacataag agaatccata ctgggtgagaa ancctacaaa tgtgaagaat 660

gtggaaaagc ctttcactgg ngttcaacct ttgttaagac ataagaaaan tcatacagg 718

<210> 4959

<211> 815

<212> DNA

<213> Homo sapiens

<400> 4959

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 tcaacaacca cataacctag atacgaaagg agcatttctg cggatttagt gttgacctaa 180  
 gttaacagac ttttaaaaga cagaactctt acaaaggggc ttgagttttt tttttttttt 240  
 gcttttttga agacgtttta atttaggggt tccagaccct gaacctcaat agtgtgcagt 300  
 agatttccaa agtatgaatc ttagacctg aaaaattctg tatctctgac cttaaaagtt 360  
 ttgattattt tattctgttt ccaaagtgt taaccagttc tccaagttct aattggagag 420  
 ctcatagtt atcagcctca cagtcacgga ctctgggatg tcttatttca tatgcctgta 480  
 aatttgtgac ttgcagtgtg actggccttc tctgtgtgt ttatgtagca caaccacatt 540  
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 aaaagggcaa aggcacacta accaagggga taataaggga ttagtaggca tttctaactc 720  
 cngtatTTaa ttggtttttg tgggttttgg agaatagatg cttaaatgtt aatttcngg 780  
 ggcaagtttt ttaaanaaaa ggaggatgaa aatcc 815

<210> 4960

<211> 756

<212> DNA

<213> Homo sapiens

<400> 4960

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 acccagccct ccactgcccg gcgcagagag gaagggccgc cgccgccgtc ccctgacggc 180  
 gccagcagcg acgcggagcc tgagccgccg tccggccgca cggagagccc agccaccgcc 240  
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 aagcgctttt cctgtattat cgggccaaat ggcagtggca aatccaatgt tattgattct 480  
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 aagataattg ataaggaagg ggatgattat gaaagtcatt cctaacagta atttctatgt 660  
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<210> 4961

<211> 792

<212> DNA

<213> Homo sapiens

<400> 4961

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 tgcactgcat gcaaagctgg aatgtaggga attttctgt tttgtactct ctcttattat 480  
 gtgtagggta aggagaatgg agccctaatt cagtttcttt aggaagtgtg gtacaccacc 540



agtagttaa atgattatta ngcggtaatg ccaagggctg tagaatagaa tttaaacatt 600  
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cagaaaatta attttagaat gtcaattctg ggtatatitt gatgagaata tgagaaagta 720  
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atatttaaag tg 792

<210> 4962

<211> 782

<212> DNA

<213> Homo sapiens

<400> 4962

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aaggacgtcc tcaagatcac cacgtgcgtg gagatgctga tcaaggagca gatgaggaaa 180  
tacaaagtga agatggagga gatcagccaa ctggaggctg cagagagtat cgccttccgc 240  
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gtgctgctgg aggaggaggc agccggcggc gatgaggacc gggaaaagga gattctcatt 420  
gaacggatcc agtccatcaa ggaggagaag gaggacatca cctaccggct gccggagctg 480  
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ctgaaagctg cagtaancct gccatctgtc tctcaaaaag ggcccctgcg cctgctctcc 720  
cttgccccgg cgcgccaac cccgagcccc ctncccaacc gttgggccgc ccctccaana 780  
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<210> 4963

<211> 710

<212> DNA

<213> Homo sapiens

<400> 4963

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tgtacttctg caacagattg aagaattagg gtctgaagga aaagtanaag aagcccaggg 600
gatgatgaaa ttagttgagc aattaaaga agagagagaa ctgctaaggt ccacaacgtc 660
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<210> 4964

<211> 799

<212> DNA

<213> Homo sapiens

<400> 4964

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gaataagatg gcggggaaga agaatttct gtcgtctctc gcagtttacg cggaagattc 60
agagcccagag tctgatggcg aggctggaat cgaggcgggtg ggcagcgcgg ctgaggagaa 120
aggcggattg gtatctgatg cctatgggga ggatgacttt tctcgtctag ggggtgatga 180
agatggttat gaagaagaag aagatgagaa cagtagacag tcggaagatg acgattcaga 240
gactgaaaaa cctgaggctg atgacccaaa ggataataca gaagcagaaa agcgagaccc 300
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gatcccgcca gaacccccctg gcagatgttc aaatcacttg caagacaaga tccagaagct 420  
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 acaaaattga gtttgtgacg ggcacaaaaa aaggcaccac gaccaacgcc acgtccaaca 720  
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<210> 4965

<211> 694

<212> DNA

<213> Homo sapiens

<400> 4965

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 tcacatctgt tcttcagcaa agggcaaacc tggaaattag ctatgcaaaa ggacttcaga 180  
 aactggcaag caagctgagc aaagcattac agaacacgag aaaaagttgt gtttagcagt 240  
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 aagcaattgn atttgaagca ataaaaccga cttatcaagt cctaaatgta caagagaaga 360  
 agagaaaatc acttgacaat gaagttgaaa agacagcaan tcttgtcatt agcaactggg 420  
 natcagcana ttaaggccaa gaagaaatta atggttagta ccaagaaaca tgaagcactt 480  
 ttccagcttg tagaaagctc caagcaatct atgactgaga aggagaagcg gaaagctcct 540  
 caataaactg acaaaatcaa ctgaaaagtt ggaaaaggaa natgaaaatt actacaaaaa 600  
 aaacatgggg gggttattct accagactga aatgggaaaa cacactagag aactgctacc 660  
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<210> 4966

<211> 906

<212> DNA

<213> Homo sapiens

<400> 4966

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gatacctcag cgggcgccac ggtggctccc agcttgtaga caaaagacgt cactctcatt 180
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ttaaac 906
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<210> 4967

<211> 795

<212> DNA

<213> Homo sapiens

<400> 4967

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aaaaagtgcc ggtcaaaatg gaaagtgaat cccctaaac aggagcacct gctggcgcta 60
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 aaagacttac ctggagatct ctttaaccag ctgatgagag atgatccttc aaccgttaat 180  
 ggtgcagaag ttttaatgtt gggataaatg ctgactttac cacagaattt tgggaatata 240  
 tttttgggag agaccttttc cagttatata agcgttcata atgatagcaa tcaagttgta 300  
 aaagacatat tagtaaaagc tgatcttcag acaagttctc agcgtttaaa tctttcagcc 360  
 tccaatgctg cagtggctga acttaaaccg gattgttgta ttgatgatgt catacatcat 420  
 gaagtcaaag aaattggaac acacatcttg gtatgtgctg tgagttatac aactcaggct 480  
 ggagaaaaaa tgtatttcag aaaattcttc aaatttcagg ttctcaaacc attggatgtg 540  
 aaaaccaa at tttacaatgc agagagtgc ctcagttctg tgactgatga agtatttctg 600  
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 catctattat gtacaatgta acaagaatta aattcagtca gccaaagctgg gagaatgtgt 720  
 gtctacgttt ggggtcaagag catattttgc aaccaatggn tacacgcaa gtacttaaac 780  
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<210> 4968

<211> 794

<212> DNA

<213> Homo sapiens

<400> 4968

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 tcatgtcaag agcaaaggat ggttttcttg agaagctaaa ttccatggaa ttcataacac 180  
 tttctagatt aatggaaaca ttcattttag acaccgaaca gatctgtgga agaaaaagca 240  
 cgtcattact tggagcactt cagagccaag ctattaagtt tgtaaataagg tttcatgaag 300  
 agagaaaaac caagctcagc ctccctcttag acaatgagcg ctggaagcaa gcagatgttc 360  
 ctgcagaatt tcaggatctt gttgattctc tgtcagatgg gaagattgct ttacctgaaa 420  
 aaaaatcagg agccacagaa gaaagggaac cagctgaagt tcttattgtc gagggacaac 480  
 agtatgcagt tgttggaaac gtattgctgt taataagaat tacccttgaa tattgccagt 540

gtgtggataa catcccatct gttactactg acatgcttac tcgtctgtca gatttattga 600  
 agtacttcaa ttcaagaagt tgccagtttag ttcttggagc tggcgcactg caagttgttg 660  
 gactaaaaac gataactaca aaaaatttgg ctctttcttc acgatgtttg cagttaantg 720  
 tgcactacat tccctgtgat ccgggctcaa tttgaagctc gactaccaac taagcaanta 780  
 tagcatgctt aggn 794

<210> 4969

<211> 646

<212> DNA

<213> Homo sapiens

<400> 4969

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 gtgcaagctg gagcgccggc tgcggcgca ggaggccgag gagagtggcc cccagctggc 180  
 tcccctcggc gccccagccc cggagcccaa gcccagagccc gagcctcccg cccgtgcgcc 240  
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 gggcgctgcg cggccccggc gctgcagggt cttcaacccc tacacggagt tccctgagtt 360  
 cagccgccgc ctcatcaagg acctggagag catgttcaaa ctgtatgacg ctgggcggga 420  
 tggcttcacg gacctgatgg agctgaagct gatgatggag aagctggggg cccccagac 480  
 ccacctgggc ctgaagagca tgatcaanga ggtggatgag gacttcgatg gcaagctcaa 540  
 cttccgggaa ttctgtctca ttttcacaag ggccgcccaa gggaactgca agangacatn 600  
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<210> 4970

<211> 863

<212> DNA

<213> Homo sapiens

<400> 4970

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 gttttggta tttataatit atcagccata tgtttatcag ccatataacc aactagatcc 180  
 caaatagatc catgtatttg tttccgtgat ttggccacat taataaatc ataaatttca 240  
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 ttataataat ctcanagatc atattaccaa aggttgccca cttgagcata ttttcatttt 540  
 gacacagaaa caaaatttag tacaaccttt cctagttccc atgtcttgat tttcatcatt 600  
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 cccagttgtt tccctgggtg aaagcagnca cacatttagn gcacggttta ttttaccttt 780  
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<210> 4971

<211> 668

<212> DNA

<213> Homo sapiens

<400> 4971

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tctgctatta acaccaagta taataacaga aagctgctct actcatcgac tggaacattc 420  
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 ccgagcagta caaacacaca gctctaaatt ttttgaagaa gatggatcct taaaggaggt 600  
 acataagata natgaaatgt atgcttcatt acaagaggaa ttaaagagta tatgcanaan 660  
 agtgggaa 668

<210> 4972

<211> 531

<212> DNA

<213> Homo sapiens

<400> 4972

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 cttggggaga agccctataa atgtagctat tgtgagaaat ccttcaacta cagctctgcc 180  
 cttgaacagc ataaaaggat tcataccagg gaaaaaccct ttgggtgtga tgagtgtggt 240  
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 acataccgaa cccttacann ccacangaaa gttcatcttg gggagaagcc ctacaaatgt 480  
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<210> 4973

<211> 694

<212> DNA

<213> Homo sapiens

<400> 4973



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 gaagaagtta acctgagtca cattgtacca tgtgagccag ttccagaaga aaagccaaaa 480  
 gaattacctg aacggagtga aaaagtggct cacaacattt tgtcaggtgc ttcctgggtg 540  
 agttgggggt tagtcaaagg tgctgagatt actggtaaag gcaatccaga aaaggtgctt 600  
 ctaaactccg agagcggatt caaccanaag aaaaacccgt ggaagttagt ccagctgtca 660  
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<210> 4974

<211> 607

<212> DNA

<213> Homo sapiens

<400> 4974

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 gggtgggtgg agggaggctg ggctctgacc tagaanccat gcttatgaat gctgttaatg 480  
 tttaaagcaa gcctaanggc actgctgaag gacaggggaa catntagaac tgaccaagac 540  
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607

<210> 4975

<211> 606

<212> DNA

<213> Homo sapiens

<400> 4975

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aaaatgtgat acaccttttc agaattactc agtcactaat gaagatgaaa gctcaagaag 540
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aattaa 606
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<210> 4976

<211> 710

<212> DNA

<213> Homo sapiens

<400> 4976

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gagaactgtg agtgtaatc aagaaggcag agcaggagaa gatgaaccag tcttcttccc 180
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ctcactaccc agatctctgc ctgccaacaa gccccgtgtt caccctggca aagagtcttt 240  
 acattcagac caaggagagt gtgactcctt ctgagcacta gctagaaacc tcaagccctt 300  
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 tagatacttt gcgtccttcc taattgactc agtctatgaa agccaagtta agcttgcttt 660  
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<210> 4977

<211> 587

<212> DNA

<213> Homo sapiens

<400> 4977

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<210> 4978

<211> 861

<212> DNA

<213> Homo sapiens

<400> 4978

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cttggnacat catcataagc ctttatgcca tcatttcaat tgctggaacg atatttgcac 720
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<210> 4979

<211> 738

<212> DNA

<213> Homo sapiens

<400> 4979

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ctgtgtacgt tattgtagtt cccagtttaa tatagttctt tgtatctctt aacagggtga 240  
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 taaaagccta gaaatttcct agaaagaaaa taggagacat ctcagagcaa tttggttttg 360  
 gtgtatatgt tctcaacaga aaaccagtgt taatgaatat catgcctcag cactgtcact 420  
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 ttgaaatgta aaatataaac ttcagtcaat atccagggtt attgtgtcct actatttaat 540  
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 actggaaagt tttaatatat ttagcccaaa ggggtactttg aattgaagtc cttgcattga 660  
 ctggttgtgt ttggntaatt gttagcttta caaggtacac ataaagttag gttgaggggg 720  
 tgtaanccn tccgtggg 738

<210> 4980

<211> 672

<212> DNA

<213> Homo sapiens

<400> 4980

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 g a g c c g g a g g a g g c c g c g c g g a c t c c g g g c t t t c c g c c g t c g c g g g g a t c t c g g g g g c a 120  
 a a g g g a t c g c c g g g a g g g g g a c c a g a g a g c c g c g c c c g c c g c g c g g a g c g c c c t t c g c 180  
 g t c c c c t g c a c c a t g a g c t g g g c a c c g a g c t c t g g g a t c a g t t t g a c a a c t t a g a a a a 240  
 c a c a c a c a g t g g g g a a t t g a t a t t c t t g a g a a t a t a t c a a g t t t g t g a a a g a a g g a c a 300  
 g a g a t t g a a c t c a g c t a t g c a a g c a a c t c a g g a a t c t t t c a a g a a g t a c c a a c c t a a a 360  
 a a g a a c t c g a a g g a g a g a a g a a t a c a a g t a t a c g t c a t g t a a a g c t t t c a t t t c c a a c 420  
 c t g a a c g a a a t g a a t g a t t a c g c a n g g c a g c a t g a a g t t a t c t c c g a g a a c a t g g c a t c a 480  
 c a a g a t c a t t g t g g a c t t g g c a c g c t a t g t t c a g g a a c t g a c a c a n g a g a g g a a t c a a a 540  
 c t t t c a c g a t g g c c g t a a a g c a c a g c a g c a c a t c g a g a c t t g c t g g a a g c a g c t t g a a t c 600  
 t a g t a a a a g g c g a t t t g a a c g c g a t t g c a a a g a n g c g g a c a g g g g c g c a t c a n t t a c t t t 660  
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<210> 4981

<211> 676

<212> DNA

<213> Homo sapiens

<400> 4981

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ccaggggagg gagcgtagct tggttgctcc gtagtacggc ggctcgcgag gaagaatccc 180
gagcgggctc cgggacggac agagaggcgg gcgggggatgg tgtgcggggc tgcggctcct 240
gcgtccctcc cagcggcgcg tgagcggcac tgatttgtcc ctggggcggc agcgcggacc 300
cgcccgagga tgaggcgctg attagcaagg taaaagtaac agaaccatgg ctgagtttcc 360
aacacctttt ggtggcagcc tggatatctg ggccataact gtagaggaaa gagcgaagca 420
tgatcagcag ttccatagtt taaagccaat atctggattc attactggtg atcaagctag 480
aaactttttt tttcaatctg ggttacctca acctgtttta gcacagatat gggcactagc 540
tgacatgaat aatgatggaa gaatggtcaa gttgagtttt ccatancat gaaacttata 600
aaactgaagc tacaaggata tcagctaccc tctgcacttc cccctgtcat gaaacagcaa 660
ccagttgcna nttcta 676
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<210> 4982

<211> 800

<212> DNA

<213> Homo sapiens

<400> 4982

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attccagagc cagcagcgcg tcctggccgc tcctgcgctc tcccgcctcc cggggctcgg 60
aggagccggg gcacgttcca ggagctgcct agggctgagg ttccaggcct gggggctcgt 120
tccagctgcc agatcccgat cagtcctggg gaccctgaga agcaccgagc catccctgac 180
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ccaggaactt tccgcagact cgccgccatc tgggagtga gcaacatgga tgcagtcagc 240  
 caagtcccca tggaagtcgt gcttcccaag cacatcctgg atatctgggt tattgtcctc 300  
 atcatcctgg ccaccattgt catcatgacc tcgttgttgc tgtgcccagc cactgcagta 360  
 atcatctatc gcatgceggac tcatccgac cttagtgggg ctgtttgaga gcctcccaag 420  
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 agcagcagga gggacttttg ggcatggacc tgagttcttg ttttgattct gccacgagcc 540  
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 atggggatgg tgatccctgc cctttctacc tcatagggat gtgagaacca cctgacttag 660  
 tggatgtgaa agctgtttgt gatcagtaaa gctaccacag atataagggt gttatgctga 720  
 atcctgagna gcttttaagg ancaagagaa cctgantgct gatgatggcc ttaaagggtg 780  
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<210> 4983

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4983

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 agaaaacccc ctgtatgtga accttagatt gtaaggcaag ccagtgcact gtgtaatatg 180  
 caaaggagggt ggtgcaaaaag agaaggcacc cgtcccagct ctccatgccc tttccctggc 240  
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 tgcagggctg tttacagcca gtttctttta ctctgacctt aaggtttcca ctgagctcat 360  
 gaaacttcaa catatgggtgt ttaaaagttt cccactcaaa tgcacacttg aaaattgggt 420  
 ccctcagcct cattactgaa ctaaataagt gaagaagttg tatctttggg gtaaaacttt 480  
 ccagggccac ttaatttttt aaccagttaa gtacgcactt tcctgggtgg gntcagactt 540  
 ttttaagtcag tgctaaagct gaaaagcgcc ttctaaatat gactgtgagt ttagtttgta 600  
 tcttacattt agtaactgtt ctgttgggcc aggactatga cttttaanta ctatgtactt 660

attcatccac actctgcact aaatacacca tagctactat agcantgtgn a

711

<210> 4984

<211> 667

<212> DNA

<213> Homo sapiens

<400> 4984

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 gctagtgggg gactcgaggc ctgagggcaa tgcggctgga ggcgaggca acggcggctg 180  
 gagctgccgg actttaattt ttggaagtga ataaaacttg ttttagaaga cgagatgact 240  
 acagctgtag agagaaagta tattaatatt aggaaaaggc tggatcagct gggataccgc 300  
 cagactctga cagtggagtg tttaccttg gtagaaaaac ttttcagcga cttagtccat 360  
 acaactgaga gccttcggca atcaaaatta tctgctgtga aagctgaaaa agaaagtgcc 420  
 aattttgatt ttgttttgga accctataaa cttgaaaatg caagattgag tagagaaaat 480  
 aatgaattat acctagagtt aatgaaactg agagaacatt cagaccaaca cgttaaagag 540  
 ttgaaaactt cattgaagaa atgtgcacgt gaaacagctg atctgaaatt tctgaataac 600  
 caatatgctc ataaactcaa actgttgag aaagagagca aagctaagaa tgaangaatt 660  
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<210> 4985

<211> 781

<212> DNA

<213> Homo sapiens

<400> 4985

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 ggagcttaca acgcaaaaat cggttacagc catgaaaatg tgtcggttat tcctaattgt 120



cagttccggt caaaaacagc acgtctttaa acttttactg ccaaccagat agatgaaata 180  
 aaagaccctt ctggactctt ttacatcctc ccttttcaaa agggctactt ggtgaattgg 240  
 gatgttcaga gacaagtttg ggattacctt ttgggaaaag aaatgtatca ggtaacaaat 300  
 tagagttgat ttttagata ctaatattat tatcactgaa ccatacttta acttcacttc 360  
 aattcaagaa tcaatgaatg aaattctatt tgaagaatac cagtttcaag cagtattaag 420  
 agtaaagtct ggggctctca gtgcacatag gtatttccga gataatcctt ccgaattatg 480  
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<210> 4986

<211> 820

<212> DNA

<213> Homo sapiens

<400> 4986

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 cagtgtccaa agtgaataat tactgccagt actgcatcac agagaaagga agggatccct 180  
 caggagacac tgctgtctcc ttctgggttg tgctaaacaa catagggagg aaagctggac 240  
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 aggatataca aaggttcctc acttataaaa tgggacagtc taaaactacc ttttagtaga 360  
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 ggtattaaga ggctagtttg agaagccacc tgaattacac aaacacagct acagacatca 480  
 ttctgtctag agaaagataa gagagaacag gttggttgaa cttgggcaga atcacagata 540  
 caattccaca ctaaagaatg aaaataagca atgaactaga cagaaggaag aaatcatgaa 600

gacttaggaa gcagaattac aatctgtcat attaacaaat ggagtttgcc ttctaagatc 660  
 agatgttgct cagaaacttt caatgtttac ctaataatit aatatacta agtttcctag 720  
 tgggtcaagc aagatgcaaa atccagctta atttcctcca tgtgctcnca agccttaatg 780  
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<210> 4987

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4987

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 tagtttgttg ctattaatit gtttgacaca taagttcatt cctaaaagtt agggatgtta 180  
 cataaagaag gggtgaggac tttatttcag aagtcattta attttttctt tattttcttt 240  
 cagattttgt atggtttatt cagaagtgcc aaatttcagt gaacccaacc cagattatcg 300  
 aggacagcag aacaaagggg cacagagtga acagaagaat aattccatga atagtaatat 360  
 gggtagcagg acatttggac cagtgggaaa tgggtgttcac actggccctg aatcaaggga 420  
 acaccagttt tcacatgctg gcagaagcaa tggccgggga cttataaatc cacaactaca 480  
 aggaacagct agtaatcaaa cagtgatgac cacaataagt aatggcaggg accctcggag 540  
 agcctttaa agatgacctg tgctaaatac tcatgtgtag tttttatact acatgcccta 600  
 cttgaacact tattgcactt ttatttaagt gttaactgtg aaaaagtacg tcctttattg 660  
 gggtttcctt ttaaaactcc ttggntttgt taagaaaaaa tgggttttgt ttttaaangc 720  
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<210> 4988

<211> 698

<212> DNA

<213> Homo sapiens

<400> 4988

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 cattaaggag cacctctgat tttctggtgg agtcgtgcta aagctggccc aaaccactc 180  
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 ttgccagcct ctcttctgga gttaccagg aatctggttc tggacacatg angatatctt 540  
 gggttaaaaa gagattaggg gccaggctta tgtttgtntt cccagcactt tgggaggctg 600  
 aagcgggata acttgagccc aaggagtttt ttgtaattt tttatacgaa gacagggtcc 660  
 cactcttata cagggaana aanggcatac acctgtan 698

<210> 4989

<211> 542

<212> DNA

<213> Homo sapiens

<400> 4989

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 gagacgttct cttccagatg gctgaagtcc acangcagat ccagaatcan ctggnagaaa 480

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tc 542

<210> 4990

<211> 578

<212> DNA

<213> Homo sapiens

<400> 4990

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tgcaattgac ttggaatcag cgagttaaac aaaagggact gaggctctaa ctctgggaat 120  
ttcaaggctc cagttacagc aaatgacatg ctgtccctc cacctatgtc tatgcaggtc 180  
tgccttggga accacctcac acatcagtgc ctctcgtgtc catctgtgta tgttattcaa 240  
attcacataa gttaagataa agatccagga tgataaaaac caatcctgat aggtgggatt 300  
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gatggcgng tactgccgac tgatctttgg ggatgccctt ctcatggagc ccctggaaaa 480  
atatccactg gaatctggag ttctcttcc aagccctatg gatttaatgt ataaaatttt 540  
ggtgaaaaat aagangaant cacacaagtc atcatnaa 578

<210> 4991

<211> 638

<212> DNA

<213> Homo sapiens

<400> 4991

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attttgttta tatctcgaga gaaagaggct gtgagtgttg ctggagggtc cgggaaggtc 120  
tctggatgcc agtgagaccc cagccccagc cggttttcca ggttcttgac agcatcacia 180

gaacgaattc aggggggagt cgagtcagaa tgaagcgcaa ggcgagaagc ttccattgca 240  
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cggaggctgg gtttcttatt ttagggatgt ttctttctct ttctttcttt ctttctattt 360  
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tctctctttc gcccgaggctg gagttcagtg gcgcgatctc ggctcactgc aagctccgcc 540  
tcccgggttc acgccattct cctgcctcaa gcctcccag tagcggggac tanaggcgcc 600  
ggccancaca cccggctgan attttgtatt ttttagta 638

<210> 4992

<211> 474

<212> DNA

<213> Homo sapiens

<400> 4992

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gccctggggc tggaccccga cgaggctctg ggcaccagag caaaaccaac agagccactg 180  
ggtccccag tgtccggcga atgaaagggg gctctgccct gggcaccaaa acagcccagg 240  
ccaaggtagc tcgaacactg gccaaagctg ctctgtccca agccaaggtg gctcgaacac 300  
aggccaaggc tgctaaggcc cgggccaagg ccaaggcagc actggtcaag gctaaggcca 360  
aagctaangc agcacaggtc aaggccaagg ccaaagtcag ggcagcacgg gccaatgcc 420  
aggctaaagc caaggcatta cgggccaagg ccanngtggc tcggacccan ccca 474

<210> 4993

<211> 625

<212> DNA

<213> Homo sapiens

<400> 4993

acacgtgaag atttgtttta aagtaccatt ctaatacttc ttcaaaagtg gctcctcatt 60  
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tcggccatga aaatccatca cgaatacttt tggatcaata gtctatTTTT aaaaagaaag 180  
aaaaaaacca cttttttata gtccctagct ttgccatag cccgccttaa gtggaaggaa 240  
agttaatcac ttaactatgt tttataaaaa gaaaaaaggg cttggaatgc tattactgtt 300  
cacacaaagt atgattctgt ttgaataagg caaatgctcc tttttttaa aaaaaagaca 360  
ttactgtaat atcaaaaacc gtggcagttt gtatacaact cggggcttga ttttttttaa 420  
aaaaacagaa tgaattgatg tcttatttta taaatgttct atatttatta ggaggaaact 480  
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ccaaacaatt ttttttgntt attaaacagt gctgaaacat tcaggntcaa gcatttactt 600  
aagatgttaa gaatgnggac tttta 625

<210> 4994

<211> 682

<212> DNA

<213> Homo sapiens

<400> 4994

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aatggttccc ctacttcttg gtgaggttca ctgtgatata caacgaacag atggcaagca 180  
agaagcggga gctcttcagt aacctgcagg agtttgcggg cccctccggg aaactctccc 240  
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tgacctgtat tgaccccaac cccaactttg agaagttttt gatcaagagc attgcagaga 360  
accgacacct gcagtttgag cgctttgtgg tagctgccgg ggagaacatg caccaggtgg 420  
ctgatggctc tgtggatgtg gtggtctgca ccctgggtgct gtgctctgtg aagaaccagg 480  
agcggattct ccgcgaggtg tgcagagtgc tgagaccggg aggggctttc tatttcatgg 540  
agcatgtggc anctgagtgt tcgacttggg attacttctg gcaacaagtc ctggatcctg 600

cctgggnacc ttctgttttg atggggtgca acctgaccaa gagagagctg gaagggcctg 660  
gagcggggnc ancttcctct aa 682

<210> 4995

<211> 627

<212> DNA

<213> Homo sapiens

<400> 4995

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taaaggtatt atagatctta ttgaggaacg agccatctat tttgatggag actttgggta 180  
agtgctaaaa atacattatt aaaattttaa attttaaaaa gcattaaaaa gaaggaaagg 240  
ataagttcat caaacgcaga gtaactatct ttttgaaatg cgactgcaag aatactctga 300  
gatgggttttg ttttaatacc tttaatccta atcgctcccc attttattta gtattttatc 360  
tgtgagagac tatgttactt tttgggtaat ataccatata cacattatgg catgcatggt 420  
gtggtagaag gaggccttca gtttgggtta gtaaatttgg gttagtgaat gtattgtatc 480  
tttttgcact tggntcattt attcattcat tctgtggact tttatagagc agctgccaag 540  
tctggggtaa tgggtgataaa aattaggaag aaaatagaga tcataaatat ttgctcctcc 600  
tgctttaaaa ntacatggn caagnaa 627

<210> 4996

<211> 514

<212> DNA

<213> Homo sapiens

<400> 4996

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aaatacagcg cagtgatggc ccctatgccc tgggtgctcgt gccaacgaga gagctagctc 180  
 tacaaagctt tgacactgtc cagaaactgc ttaagccttt cacctggatt gtgcctggag 240  
 tgттаатggg aggagagaag agaaaatcag aaaaggccag actccgcaaa ggaataaata 300  
 tccttatctc aactcctgga cgcctgggtg atcatataaa atccacaang aacattcatt 360  
 ttagtcggct gcggtggttg gtgtttgatg aagcagacag aatcttgat ttgggttttg 420  
 aaaaggacat cacagtgata cttaatgctg taaatgctga atgccaaaaa acgacagaat 480  
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<210> 4997

<211> 670

<212> DNA

<213> Homo sapiens

<400> 4997

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 ccatataggt gagatctgat aatgttttta ggtagaaagg aagaaacttg tgaagcagga 180  
 gagactaaac ctgtttgatg tttttggttg ggggccangt tagagatagg atcgggtgta 240  
 tgtgttggtg aattattcct aaaagggaag agagacacca gtaattgcaa aatcatcaag 300  
 tatttataga ggtagaggag aaagaataaa ttcagatgtg ttgagataga tgagagtacc 360  
 tatgaggatt tgtttgattt gggaaaatga aagcagaagt angagaagca gaagtangag 420  
 aaattcagat gtgttgagat agatgagagt acctatgagg atttgtttga tttgggaaaa 480  
 tgaaagcaga agtaggagag ggcagaggat aattggaagc ttagaatggg gaaaggatgt 540  
 ctgtgctgtg gggaataactt tcaggcaatt gttaccanta ttttgaagat gacaacntgg 600  
 ttaacctcca aacaatttgt ggaccacccc atgattgtag ntacattttt taagtattca 660  
 acaatgggag 670

<210> 4998

<211> 655



<212> DNA

<213> Homo sapiens

<400> 4998

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acatgcgaag aaaatgccca tgcatttctt taagcagaaa tataagttag tgaatttggt 60
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tatcagcttt aaccttctca tttgtctcct actgcttctt ttcttgttct ttattctcat 180
ccatccccct ctctgtcttt gcctctactc ttcctctatt ccttcataag aatctaaaca 240
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cataactagc tgggcctagt acctttgggt tagcaatttt gccagagatg ttggagaaaa 360
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actttagagc ctattctttt aatcattgta cttactgtc tttatagaca aggtcaggct 600
ctctatgctt ctgtgagata attttccna aggagtggta aatagntact atana 655

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<210> 4999

<211> 735

<212> DNA

<213> Homo sapiens

<400> 4999

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cagagtctgt ccaagggtgga gaaaccagga tctatttgga ttigccacag aatttcaaga 180
tatttgtgag cggcaattca aatgagtgtc tccagaatag tggtttgaa tacaccattt 240
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caccttcatt cacacttagt ggcaaattgc tgtcaccaac tcagctatct gctctatgca 360
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aatttcttaa ggaagagacc ctagcatact tgaatatgt ctctcctttt gagctcaaga 480  
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 attttgggag gagctgctgg atctgatgta gaccaagagg aaattgtgga tgagagagca 600  
 gtgcaaggat gtggaatcac tgtcaaact gatcaaggaa aacctggnc tttgatcaagc 660  
 tcagcaagat aaaatgcttt aataanaaaa ttgttcccg tgcaataacc ggttccngtg 720  
 aaaagctggg gtttag 735

<210> 5000

<211> 754

<212> DNA

<213> Homo sapiens

<400> 5000

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 gaaacaggac ttgagaagt tcctacataa actgcgttcc gaagctgaaa ttgagagaga 180  
 atgtgtggca tcactatcgt catcatcatc atcatcacca tcatcaacag acaactacaa 240  
 ctttgaggaa gaagaatact aagagaaacc agaaatgaac tctattcaag aataatgcat 300  
 acaattcagt ggtatcagtt taattgtaac aatatattta attcaagtcc aatccatgta 360  
 atcagtatta agagtgtgtt ttaccattca tctttaaaat cttcaaatca ataaatctca 420  
 gtaagttatt cttaaaagat ctgtccaagc atgatcttgg ctcttaatag taaaaccata 480  
 ttttaagatg gaaaaagaat cattatgaag catagagagc tttcaacat ttcttttgna 540  
 aatatacttt gatataatag caaccgttca tcataatata anacagaagg gagattaatt 600  
 tactgtggca caagaaagtc ctgccaatc ctaagtgcc caagtagttt ctctcagact 660  
 ttttacattt tttcaaggct caagcaanac caaaggccca nctccagggt ttgggagcaa 720  
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<210> 5001

<211> 748

<212> DNA

<213> Homo sapiens

<400> 5001

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ctctcaattt tttttgtttt tgtttctttt tacagggttt caccatgtca cccaggctga   60
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cacagcctcc caagtcccaa gtgcttgga ctccaggaa acatgccaccat gcctgactaa  180
ttttttattt ttttaatttt atagagacag agtctcatta tgttgccag actggctctg  240
aactcctgga cctaggcagt cctcctgcct tggcccccca aagtgctgag attacagggtg  300
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gtgtatttgt ggtagaaatt tcattcactc cgatgacttc acttattatc tatacataat  420
gctgatgact ccagatccag aagccaggag tttagagacca gcctgggtcaa catagtgaca  480
cgtctctaca aaaaaagaaa ggaaaaaatt agccagggtat ggtggcatat gcctgtagct  540
ccatacctgt ataataca gctattaaat atctgctaag caaactaaac taagcatttt  600
caaaagtaaa cttgtgaaac ctgatggatt tcagtanttg acatcaagca tctacttttg  660
ctgaaagtca gtnncctgga cattatttat gacacttatt ttttttccc aaccttgccc  720
ttatccattc aattcaccaa ngccctgg                                     748

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<210> 5002

<211> 789

<212> DNA

<213> Homo sapiens

<400> 5002

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tttaaaaatt agatgtgttg cagttttgca tgtaatcggg tataccttta ttggactttt   60
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aacccttggt tgaaatgaag gaactgtcaa taattgacag ccaactaata cagtaaactg  180
ttatactagt tttagacttt agacctcagc cttttgtgtg gaagaagtca cagctttctt  240
aggctttaaa ggaaaagaag gaaggactta aatagctttt cttcctaccg ggattaccta  300

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tggttttccct tgcttgcaat ctcactgat tttgctagaa atcacaacca tattgtttat 360  
gcatattgca tgagtattac caagaaaaat cttaaaagtt gtgatgtgac atgatataaa 420  
ggatctcttt atgttaaatg tctttccatg tacctctggt gtgtcaggga ttttgtgcct 480  
caaaaaatgt ttccaagggt gtgtgtttat actgtgtatt ttttttaaat tcacggtgaa 540  
cagcactttt attattttcca gttcagaaga gccaaaaaaa agtatcttca tttaaaaaga 600  
aatcaagtca gtttttttta aaagaatgat ctatggaaga aaaccaata gtacttataa 660  
tatacaaag aattatacta ttaagataaa gaattaaata ttccantttt ataaagataa 720  
atacnaagt anataaaaaac aaattttaag ttttaagttt caagacatag aattcacttt 780  
tggagggga 789

<210> 5003

<211> 753

<212> DNA

<213> Homo sapiens

<400> 5003

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tcattattaa gccagttgat ggtctctaatt cctccttatt ccttatatcc cagatctgga 120  
actgggcaaa ctattaaaaat gcaaacagaa aacttgggtg ttgtttatta tgtcaacaag 180  
gacttcaaaa atgaatataa aggaatgtta ttacaaaagg tagaaaagag tgtggaggaa 240  
gattatgtga ctaatatctg aaataactgc tggaaagaaa gacaacaaaa aacagatatg 300  
cagtatgcag caaaagtata ccgtgatgat cgactccgaa ggaaggcaga tgccttgagc 360  
atggacaact gtaaagaatt agagcggctt accagtcttt ataaaggagg atgaactgga 420  
atttttattt atacctttta gcgtactctt tttttttct gtaagtaagt ttggtttcat 480  
catgagggat gaaggaaaag atttgatact gaaaactaaa ctgaatagtt ggttcctgaa 540  
atcttggaact gtttatgacc tactggctcc tttaaatagt aactgaaaac taaaatggna 600  
tatttttagtt aacgcttcta caagtatttt cattttaaaa gcttacatga tcctaactaa 660  
agtgtcatga gaaagggata tcacacctgt ngccaatttc caagttttta gtgaatcccc 720  
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<210> 5004

<211> 746

<212> DNA

<213> Homo sapiens

<400> 5004

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gcatgtaaag actttgtccc tcatgacttg gaggtccaga ttcctggaag agtctttttg  180
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aagagagctc acagaagatg gacttgaaaa aaactttgct gccaatctc tgggtgtgta  420
cattctcacg accggcctga tccctgtgct ggagaaagaa cacgaccccc gagtgataac  480
cgtctcctca ggaggaatgt tgggtcagaa actgaacacc aatgatctcc agtccgaaag  540
aacaccattt gatggaacta tgggtctatgc aaaaaacaag aggcagcaag tggttctgac  600
ggagcgggtg gcccaaaggc acccgcccat ccatttttct tccaggcatc ctggctgggc  660
cgacacccca agtgtgaggc aangcgattc cnggggttca anccaagttc ggggaaacgc  720
ctgcgctccg agggccaagg gggcgg                                     746
    
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<210> 5005

<211> 698

<212> DNA

<213> Homo sapiens

<400> 5005

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aaaaaatggc agcgttgag gaagaattca cgttgtcttc ggtagtcctg agcgccgggc   60
ctgaaggact cctaggcgtg gagcagagcg aaaaaacaga ccagtttcta gtgacagaca  120
    
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gcggcaggac agtcacccctc tataaggttt ctgatcagaa acccttgggg agctggtcag 180  
 tgaacaagg tcaaattata acatgtccag ctgtgtgcaa ctttcaaact ggagagtatg 240  
 ttgttgtaca cgataataag gttttaagaa tatggaataa tgaagatgta aacctggata 300  
 aagtatttaa agctacattg tcagcagaag tatataggat actttcagtg caagggacag 360  
 aacccttggg gctcttcaag gaaggtgctg ttcgtggttt agaggccttg cttgcagacc 420  
 cccagcagaa aattgaaact gttatctctg atgaagaagt gattaaatgg acaaagtttt 480  
 tcgtagtatt cagacatcct gttttaattt ttattactga aaaacatgga aattactttg 540  
 cttacgtgca aatgtttaac tcacgtatct taaccaataa tacactctta cttggacaag 600  
 acgaaaactc tgttataaag agttttactg catctgtaga tcngaaattc atctctttga 660  
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<210> 5006

<211> 889

<212> DNA

<213> Homo sapiens

<400> 5006

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 agtcgctggt tcaaacagtg gaaaaaatat gttggctttg acagttggga caaataccag 180  
 atgggagatc aaaatgtgta tcctggaccc attgataact ctggacttct caaagatggt 240  
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 gaaggttgga ataaacttgt cagctggtac acattgatgg aaggtcaaga gccaatagca 360  
 cgaaagggtg ttgaacaggg tatgtttgta aagcactgca aagtagaagt atatctcaca 420  
 gaattgaagc tatgtgaaaa tggaaacatg aataatgttg taactcgaag atttagcaaa 480  
 gctgacacaa tagatacaat tgaaaaggaa ataagaaaaa tcttcagtat tccagatgaa 540  
 aaggagacca gattgtggaa caaatacatg agtaacacat ttgaaccact gaataaacca 600  
 gacagcacca ttcaggatgc tggtttatac caaggacagg tattagtgat agaacaagaa 660  
 aatgaagat ggaacatggn caaggggtcc ttctactcct aaaaagccac tagagcanag 720

ttgctaataga acaattttaat ttccacatac gtcacagaaa gagagctaaa gggctctggg 780  
tatcatccac agacctgaca atcaaccct aaataacctg atattaactc cacaaatgtt 840  
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<210> 5007

<211> 663

<212> DNA

<213> Homo sapiens

<400> 5007

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cgcacgtttt cttttttaat actccctaag aaagggaata accttcaagc tggcggggagc 180  
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ctgtttggac gagaatggaa tgactcctct aatgcatgca gcatataaag gaaaactcga 360  
tatgtgcaaa ttactactgc gacatggagc cgatgtaaat tgtcatcagc atgaacatgg 420  
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agaagctggt gctgagacag atgttgtcaa ctctgtggga agaacagcag ctcagatggc 540  
aacctttgtg ggtcaacatg attgtgtgac cataatcaac aatttctttc ctcgagagag 600  
actggnttat tacactaagc cccaaggact gggntaaaga gccaaaaact gccccaaagt 660  
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<210> 5008

<211> 632

<212> DNA

<213> Homo sapiens

<400> 5008

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 gtcataaaaa aaagtcttca gttctcctct gtttttagtca cactctttgt gctatggaag 180  
 tgcttctctt tgcactacct tctccacctc gtcaattatc agaatacagaa aaaagtcgaa 240  
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 aattttaatc catgtgataa ctaccgatgt catcagcaaa catctggtga cttttggatg 540  
 aaattagcga ccaatttana ttggctctta attaataatta acctttgngg tctcctactc 600  
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<210> 5009

<211> 706

<212> DNA

<213> Homo sapiens

<400> 5009

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706

<210> 5010

<211> 716

<212> DNA

<213> Homo sapiens

<400> 5010

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gccagattaa aaccatgagg caacaagcct gcacgctaag gattgtttgg gggcaggggg 120  
acagcagtgg agagagtga aagaaccagc agctaagaga cacaatcct aaagctcaaa 180  
gcctgtccca gatacaatct ttgcagtgat tcacacagga aatgttaccg aaagtattcc 240  
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gaataggaga gaagacattg cacagggatg ggggttcctt attctgagtt gattgtggtc 360  
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tgatttgacc taagccccct ccctcctctc ccctctcctt cccatctctt cccttccgtt 540  
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aggaattaat acaactttat ctcatctcca cctttagacc caggcaacca gatcctcttc 660  
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<210> 5011

<211> 793

<212> DNA

<213> Homo sapiens

<400> 5011

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aacaatggcc agcaatcaca aatcttcagc agctcgccct gtttcaagag gtggagttgg 180  
 gttaacagga aggcctcctt ctgggatacg acccctatca ggaaatattc gagtggcaac 240  
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 aatgaaaact gggacgaaag gtccccagag gcaaatttta gacaaatctt actatcttgg 420  
 gcttcttaga agtaaaataa gtgaacttac aactgaagtt aataaacttc agaagggaat 480  
 agaaatgtac aatcaagaga attcagtata tttgtcatat gaaaagaggg ctgagacttt 540  
 agctgttgag ataaaagagc ttcaaggaca actagcagac tacaacatgt tggtagatta 600  
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 aatgatcgag aaacacaaag tttggatgtc atatttactg aaagacaagc ganagaaaaa 720  
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<210> 5012

<211> 745

<212> DNA

<213> Homo sapiens

<400> 5012

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 tacaggccca gctcctccag gagaaaagat tactggagaa acaactgagc gagccagaca 180  
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 aataacactg attaaataag aactggagca agtactctta agtgctacat taacctggtt 600

agaaaggctg ttggattcca gattgctatt gtaaaatctc catcatgatg tgttggagtg 660  
aaggattaga tngggttttac caacagtcct actagatatt ttggnaanca gcttccctta 720  
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<210> 5013

<211> 738

<212> DNA

<213> Homo sapiens

<400> 5013

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gcaatcaatg acctgggtgaa gaagtacaag ctttctcgag cttttgtccg gccctctggt 240  
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atactgggac ttaagtatac aattcagtca ctaactgtac agttttatgt ggggaacaat 660  
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<210> 5014

<211> 697

<212> DNA

<213> Homo sapiens

<400> 5014

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attttctcac ttatcaagta tgcaaatgta tgtatataaa atgtgcttta aaaatagaga 600  
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<210> 5015

<211> 745

<212> DNA

<213> Homo sapiens

<400> 5015

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catcggcaac gacgtggact tcaagctgct ggagaaaccg tcgctggaga actgtggcct 660  
cacacggcgc gtgcacgang agggaggacg caagctcgca gctcatcggg ntctacgatg 720  
anatcaggac cccgctcctc tctga 745

<210> 5016

<211> 582

<212> DNA

<213> Homo sapiens

<400> 5016

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ccagaggctt agggaaactc tggaaccag acaagaatct tttcgctggg aaagactcag 180  
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aattgccagt ccagctgggt agtcccangc tcctgtcttg gggatgtttc ccctgtcagc 540  
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<210> 5017

<211> 779

<212> DNA

<213> Homo sapiens

<400> 5017

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aaagggaaga cctacaatga aacagctcca atggctggga gcaaggatg aaatgggaag 720  
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<210> 5018

<211> 791

<212> DNA

<213> Homo sapiens

<400> 5018

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tcatattatg gtacttctgt ctttggatca ccaagccatt caaagttatt cataaagctg 180  
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 tcactaagaa gccagaaat gggtatcagc cattgataat ttaagaagtg tccttgcctt 720  
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<210> 5019

<211> 743

<212> DNA

<213> Homo sapiens

<400> 5019

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 aatgattcctt gaaattaaga agaatcaatt gaaatttgct ccctttaaat gtgtagtacc 180  
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 tcattttaca actgaagaaa tggtaaagtt aaaaattaaa aggccttatg gaagaaaatc 300  
 tcagagtga aatgtgccgg cctcacgaag tacacaagtg aaaaaacagc tagctatgac 360  
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 aacagaaagt tctttacaag tgattacagt tacttcagaa caatgtaata caaatgcact 540  
 cacaacaca caaaccaaag gacggaagat taggaggcat aaaaaagaaa aggaggagaa 600  
 aaaacgaaag aagccagttt cccaatccct tgagtttcca acaagataca agtccttaca 660  
 gacccttacc gatgtgttca acangggatg ctttgctgnc tttacgatac agcaaaactt 720  
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<210> 5020

<211> 690

<212> DNA

<213> Homo sapiens

<400> 5020

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 aatgtaaatt agtacaacct ctgtggaaga caggatgggt atttctcaa gaactgaaag 180  
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 aagtcgtgaa atcagcctaa gtgtccatca atgaatgatt ggataaagaa aacgtggtat 360  
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 catggatgga tttggaggcc attattctaa gtgaaaaact gcaatggaaa atcaaatact 480  
 gaaggggtgc gttgccctc cacacctgtg ggtgtttctc attaggtgga atgagagact 540  
 tggaaaagaa aaagcacaga gacaaagtat ggngaaagaa ataagggggc ccaagggacc 600  
 agcgttcagc atacgggngg atcccgttg gcctcttgag ttccttagn atttattggt 660  
 cattcctggg gggttcncgg aaagggggat 690

<210> 5021

<211> 755

<212> DNA

<213> Homo sapiens

<400> 5021

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 agaggagatt agccactgga cagccaaact ccaggggaag gtcattctcc cactccatcc 480



cccttccagc tccccatcca tcctgctgag agccacctcc accactcagt gaaaccgctg 540  
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gtccagtga cttgtctaaca ctttaagtcac ccacggacag caaggctaac agaattgctgt 660  
aacatgtgnc cacttgggct ctggggagtt gcagacacca cccgtaggtg ctgccaatggg 720  
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<210> 5022

<211> 703

<212> DNA

<213> Homo sapiens

<400> 5022

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ttaagactga accacaaaga ggtaaggntc tccaaagaga tggagcgacc ctgggttang 660  
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<210> 5023

<211> 781

<212> DNA

<213> Homo sapiens

<400> 5023

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<210> 5024

<211> 740

<212> DNA

<213> Homo sapiens

<400> 5024

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<210> 5025

<211> 705

<212> DNA

<213> Homo sapiens

<400> 5025

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<210> 5026

<211> 718

<212> DNA

<213> Homo sapiens

<400> 5026

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ccaaccttat accactgttg taggacctat gaaaaataat ttttaaaaag ctgtaaaagt 660
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<210> 5027

<211> 715

<212> DNA

<213> Homo sapiens

<400> 5027

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<210> 5028

<211> 705

<212> DNA

<213> Homo sapiens

<400> 5028

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<210> 5029

<211> 519

<212> DNA

<213> Homo sapiens

<400> 5029

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gatctacagc taagacgcca ggaacccttg gaagcctaga aatggagaac ctgaagtctg  180
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<210> 5030

<211> 653

<212> DNA

<213> Homo sapiens

<400> 5030

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ctaccactcc tgcaagcagt atggcatcac gggcgaaaaa tgtccgagga gaactgctgg  600

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ccctgntgaa ggacctgccg agtcaactgg gctgaaattg gggcancggn tca 653

<210> 5031

<211> 752

<212> DNA

<213> Homo sapiens

<400> 5031

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 agagtgaac gtcctcctgg ccccgagcgc gtcgtcgcgc cccgggagca gaccctcgcc 180  
 cagcagttac cgccgtcccg actttccgtt ccagttgcag ctcttgccgg gcaacatgtc 240  
 aagagccgcc gccgctacag ctgccgccgc cacctgggga agagcagcag cagcagtggc 300  
 ggccgcgggc acacgggggc aataaaccga gccacccggg cgtccagcgt gccggggaac 360  
 cctctctgcg ctcaactgcc ggccgggacc acgccatgtg ctgagccatg tccctggccg 420  
 cgcccgcggg cagcgcattg ggcagcgcct gagtggcggc agatcttgcc tcgatgtccc 480  
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 gctcttcgcc atgctctgcg tctggctcta tatgttctg tactcgtgcg ccggctcctg 600  
 cgccgccgcg ccggggctgc tgctccctgg gctctgggtc cgccgccac acgaaccgcc 660  
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<210> 5032

<211> 686

<212> DNA

<213> Homo sapiens

<400> 5032

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 ataaaatttc tggtttttgt atagccatag tgacaggtag ccaccatacc aattttaaac 180  
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 caatattaac ccttcatttc tgtaaatacca tcagtcagga atgtattcac cagaagaagc 300  
 acatctctga gtatgccaac caatcaacta aagtctcacc caagtaactg tggttcaaca 360  
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 tctctgaact ccatgtatcc cccaaacatt ctatgaggtc agcagtctgc tcagctagga 480  
 gagatggctt gatcagcact gtccttcctt accatgtcag cgataagttg agccttgtgt 540  
 tttttgtttg gttcacatat tgataatggt ctatcaactt ctaacagttc aatnagatgt 600  
 tggttttaac cactaaagtt ttgggaacaa agctgttagg cagcaaaagt taactgatat 660  
 actgggaaaa tngcaagttt cntcca 686

<210> 5033

<211> 553

<212> DNA

<213> Homo sapiens

<400> 5033

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 gcctccctgg agagccaagc tgggtgttga ggtggcgctt ccagggtcca cctgctgcc 180  
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 ggtggagcat gactgctccc gcgagatcct gctggcccggt ttaagcagg ccaccaagag 360  
 caaggtctgg cgcgtgggtg gctgccggcc caccttccca aggccctgt gctaccaagt 420  
 ctgccactac tacagccctg ggctcggctg ccggcgccac cgaaaccggt gcacctttgc 480  
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 atggctgaaa ggc 553



<210> 5034

<211> 517

<212> DNA

<213> Homo sapiens

<400> 5034

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agctaattggg taatgaatac ctttttgttt gtttgtttgt ttgttttggt tttttttttt 180
ttaagggtct cactcttttg cccaggctgg agtgcagtggt cacaatcacg gctcccaggc 240
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ctccatgttg cacaggctgt tctcaaactc ctaagctcaa gccatctgcc tgccttggcc 360
tcccaaagtg ctgggattgt agacataagc cacctcacc agcctatgaa tatctttcta 420
acattgtang aatgaggtaa tgtttccatc agtctaatac agatatattt cttccctcca 480
aaacagttta ttttgattgt ttantttant ttgattg 517
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<210> 5035

<211> 539

<212> DNA

<213> Homo sapiens

<400> 5035

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gagggcgaag gaagtacat ttatttagcg ctgtgtgtgt gctcttattt ccactggcct 120
tacaagaccg tgcactgtgt agatgaggaa actgagtcac aataaatatg tgctgaaccg 180
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cgggtaccaca ggaatcttga cgaacggccc aaatgcctgg ccgctgtcag agtgacgccg 360
cgatgagagt aaacgggcca gcatcccgtg caccagcggg gtggaccagc gggagtctgc 420
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acacaggccc ccgagcagga cgccctcgtg cgcangcgcg ggggtgtacgt tggccggggg 480  
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<210> 5036

<211> 622

<212> DNA

<213> Homo sapiens

<400> 5036

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tcccagctgc atagaggggtg tcaccattat tttagataat agccatggcc ggtgcccact 180  
ttaatcactt ttccaatcac ttttcaactga ttgcttctaa ggcacttgat ttcagatgtc 240  
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tgcctccagg ggttggtaaa ctctctaaaag tgccaagtca tgaatatttt atgctttgca 360  
ggcccaagaa gcaaaagtaa gactattatg tagataccca taaaacgatt taaagtgaag 420  
tcatttaaaa atatgaaaac cattcttcac ttgcaggcta cgaacaagca gcctcctggt 480  
tgactggggt tgctcagcga gccttctggc ttctccggca cacacacatt caggtctcca 540  
tctatgcaa tggagacctc ctctctcctt ctcaccactg gtantaaggn ngaaaaacag 600  
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<210> 5037

<211> 655

<212> DNA

<213> Homo sapiens

<400> 5037

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taagaactgg atcaagtatg cccgctttga agaaaaacat gcttattttg cccatgcacg 180  
 gaaagtgtat gagagagctg tggaattctt tggagatgaa catatggatg agcaccttta 240  
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 caagtatgcc ctggacagaa tttcaaaaca agatgcccaa gaactcttta aaaattatac 360  
 catctttgag aagaagtttg gtgataggcg ggggtattgaa gatatcattg tgagcaaacg 420  
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<210> 5038

<211> 595

<212> DNA

<213> Homo sapiens

<400> 5038

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 ggtgtacatt ttgatgttga acatcagttt tcatgtagac ttaggactca tgtgcagtaa 180  
 atataaataa gtgtagcatc agaagcagta ggaatggccg tatacaacca tcctgttaaa 240  
 catttaaatt tagctctgat agtgtgttaa gacctgaata tctttcctag taaaaatagg 300  
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<210> 5039

<211> 638

<212> DNA

<213> Homo sapiens

<400> 5039

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gctcatcagt ctctgtaaat attgggtgca gaatttaggg gcagaagcaa tggcttgtga  180
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aggagtctct gtcctacaaa tctacacttt taaggatgta tgaaattgtg gaattcattc  300
cctcaggatc tgaanatctc agttctcaaa aatcacaagt tgcaagaata tgatacctaa  360
aattgaaagt ttttcacatg ttttactgt atactgaaaa tactcccctg gaagcagggc  420
tgcatcataa tttttgtggg ctttatgtac ttttgccttt gcgaaccatt tcctacattc  480
aaaatagtag taacanatat atatatatat atacacacac acacacagaa atatatattt  540
ataactgcat tgataaaagg tgaatatatt agcattttct tcaacctaaa agtttatgta  600
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<210> 5040

<211> 698

<212> DNA

<213> Homo sapiens

<400> 5040

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gactagcttc atttctggaa gatttttagag ggccaacatt cagctcccaa ctctgcact  120
gtgtactcta actctggggg acttctattg ggccccagct ttgttctttg gctccccaag  180
gttaggaatc cactgcggtg aaggggcctg aggtgtggca gctgtggcag agtgctagca  240
gggtgcgggg tgcctgcctc catgtgggtg ttcaccacag tggcagaaac aatgcagctg  300
ttggggggagc tcctgctggc aactatatgt atggttgtgc tggacatggt gttggcttgg  360
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attggtcagc atgggggagg actgttggtc tctgcaaaaa tgtttaaaaa agaaattggt 480  
 tcaaaaatct atataaagct ttggattctg taaatccaaa attcattact ggttttattac 540  
 ttactggcc agggattatg gcaccaagaa gagagatctg tgggtctgac aataagccat 600  
 gaatgtggtt tgcccantac atgggtttanc ttgttttctg tatcanacac gctagtttaa 660  
 ttacaaatg gagttttgat atactcagga ctgtgaat 698

<210> 5041

<211> 609

<212> DNA

<213> Homo sapiens

<400> 5041

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 tgtctaagaa agagagcttt gctcctggta ctatgtacaa gccctttggg gaggaagcag 240  
 ctgggactat gactttgtcc caattccaga cactgcatga gaaggaccag gaaactgctt 300  
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 gcanacagct gacccggcga gaaatggaaa tagaaaagtc tttatttcag ggagctgac 540  
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<210> 5042

<211> 653

<212> DNA

<213> Homo sapiens

<400> 5042

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 acaaactttt ccccagactt actgtttcct tgagaatcct ttttctttgt tcttcatact 180  
 ttaacttcca taaggagctg gctcctctgc ctataaataa gagcttagag aaatacttca 240  
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 tccaattttt acatatgtgc gatcacttgg ntcatactga taactgaact gactcagtct 480  
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 gtgtcatctt ctttatttgc ttgtgaaca ctcaccacag cacctatttt tctctggtat 600  
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<210> 5043

<211> 686

<212> DNA

<213> Homo sapiens

<400> 5043

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gatggacaga tttactgtca cttacgatt ttatggaaaa taaattggnt atcntaattt 660  
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<210> 5044

<211> 714

<212> DNA

<213> Homo sapiens

<400> 5044

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gagggctggg acgggcggct gggaagtggg aaaggagct ccttttgtct tctcttccca 180  
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tccctcttct ttcttacttc cataagtatg tatgtgcaga gattgaaaaa taaccttgag 660  
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<210> 5045

<211> 640

<212> DNA

<213> Homo sapiens

<400> 5045

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<210> 5046

<211> 506

<212> DNA

<213> Homo sapiens

<400> 5046

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 ccactatatt caaactatgc aagaaagagt ccatccagaa gttcaaaggc acttagaaga 180  
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<210> 5047

<211> 785



<212> DNA

<213> Homo sapiens

<400> 5047

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aaatt                                             785

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<210> 5048

<211> 679

<212> DNA

<213> Homo sapiens

<400> 5048

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tccatgaatg tacatgctat ctggttggtt aaacattact tagttgatta taatgactgt  180
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<210> 5049

<211> 806

<212> DNA

<213> Homo sapiens

<400> 5049

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aacatgatat tcattccgag ggtgtattaa gtcaagagtc ttcccagtc acattcctct 480  
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<210> 5050

<211> 626

<212> DNA

<213> Homo sapiens

<400> 5050

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gcgcgcccc cagtgacagg gcccgcgggc gcgggcggag acagagttgc angccccgtt 540
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<210> 5051

<211> 747

<212> DNA

<213> Homo sapiens

<400> 5051

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<210> 5052

<211> 623

<212> DNA

<213> Homo sapiens

<400> 5052

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 gcgcctccaa aacctaggcc gggggcgctg gaaaccctta ccggcactcg gccaccgcgg 180  
 cagacgcttg ctctgccac gccccccccc ctcccccgca tcacgtgtct gcactcgctt 240  
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 acgtacacat gctctagaaa cttgcttgaa aatccgtgaa caggaaacta agagtcttag 480  
 gagtcagttg gatgtgacac ataaggaggt tggaatgttg catcagcagg tagaagaaca 540  
 tgaaanantc aagcaagaga tgaccatgga atataagcag gagctgaaga nactacatga 600  
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<210> 5053

<211> 668

<212> DNA

<213> Homo sapiens

<400> 5053

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ggcgaccatg gagcttttgc ggactatcac ctaccagcca gccgccagca ccaaaatgtg  180
cgagcaggcg ctgggcaagg gttgcggagc ggactcgaag aagaagcggc cgccgcagcc  240
ccccgaggaa tcgcagccac ctcagtccca ggcgcaagtg ccccggcgcg cccctcacca  300
ccatcaccac cattcgcact cggggccgga gatctcgcg attatcgtcg accccacgac  360
tgggaagcgc tactaccggg gcaaagtgtt gggaaagggt ggctttgcaa aatgttacga  420
gatgacagat ttgacaaata acaaagtcta cgccgcaaaa attattcttc acagcagagt  480
agctaaacct catcaaaggg aaaagattga caaagaaata gagcttcaca gaattcttca  540
tcataagcat gtantgcagt tttaccacta cttcgaggac aaagaaaaca ttacattct  600
cntgggatac tgcagtagaa ggtcaatggc tcatattttg aaaagcaaag aaangtgttt  660
gacaagan                                           668
    
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<210> 5054

<211> 621

<212> DNA

<213> Homo sapiens

<400> 5054

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ttcatttttt tttctttttt aagagcgagc ggctctgcgg tggcggtttg ggggtggcg  180
cgccgagggtg aggtcgtctc gcctcccgcg cgccggtaga ataaacagcc attggactct  240
tcaaacaaaa acgtgtctc catcaagtac tgctttcgca ggataagtga ccatttttaa  300
    
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tcagttgaaa ttaacggaaa gtagcagtta tttctgaaag atgacatcaa ttatataata 360  
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ctaactcctc tggacctcaa cttcatctgt aaacagataa tttttctcat aggggtcaatg 480  
atcatgtaaa ttagataata tccataaaaag gaataataata catgattgga tgtttcatta 540  
tggatggagg ggatgatggg aaccttatta tcaaaaagan gtttgtgtct gangcagaac 600  
tagatgaacg gcgcaaaaang a 621

<210> 5055

<211> 727

<212> DNA

<213> Homo sapiens

<400> 5055

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gtagacaag aacccgatc ttagttgaac tctggagcaa aaatcctgca tcattttag 180  
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attcacatct tccccatgct tccagagaat gcataattct cctttgaaaa aagaaaacca 300  
gcactgttca taatagccaa gatttggaag ccacctaat gtccatcaac agatgaatgg 360  
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cagaaagaca aacatcacat attttcactt attttgggga tataaaagtc aaaacaaact 540  
catggagata gagaacagat agacgggtac cagaggctag gaggaggagt ggtggggggc 600  
agttagtgat ggtaattgg tacaaaaaaa tggttagaaa taataanata agacctagta 660  
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<210> 5056

<211> 712

<212> DNA

<213> Homo sapiens

<400> 5056

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 ttttcaggta agaacatatg agaggcaggc tgagaccaat tttctaccag gccagctaata 180  
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 tctccagcta ctgctgtctc tcagactctc acagtatgtg taaccacttc ctcctctgca 480  
 cgggatcacc ccagaagatc aactctacta gatcatttga ggacaatgaa caaagtctca 540  
 agactgaatt cccacagaaa acatttctcat gaaaccaccc aatattctgg tgaagttaaa 600  
 gaanggcattg tggttcggaga caancaagaa gcagcaatgc tcaaaaccac aaaactctgg 660  
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<210> 5057

<211> 817

<212> DNA

<213> Homo sapiens

<400> 5057

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 tttgaactgt gtgttggttag gaggtactcc tgacaatttt cactttacaa acatttattt 180  
 cttgatttaa cctaccacca ggatgacggc tgtcactcac tgattcacca aaaattggac 240  
 aaattgctta cttatttttg ttgatttttc ttaaatgtat gtatagctta catttatatc 300  
 aatattcaac attagaagtg tttcaagtct tcacttagaa atttgttgat gtttttgtga 360

tacaaatatg ccataggaac taattcttgt ttatattaat tagcctatag taaaactggt 420  
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 atatccattt tgcctcttc ttttttgga tacaacaaa acttacatag ggcttttta 720  
 cattttaccg gggcctatgt aactggagtt tttagccagt ggnnaaatg tccaagtgga 780  
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<210> 5058

<211> 691

<212> DNA

<213> Homo sapiens

<400> 5058

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 aggattccta agggatttgt gtgaggtctt actatattta ttgtacctc ctggagattt 180  
 ccagaacaag atcatgcgat actttgtcag ggaaatcctt gcacgaggaa ttcttcttcc 240  
 attaataaat caactcagt atcctgatta tattaatcag tatgtcatat ggatgatccg 300  
 tgattctaac tgcaactatg aggcctttat gaacattatt aaattgagt acaatatttg 360  
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 gaaggtatgt gactcaagaa tacagcgatt gcagtcaggc aaagaaataa atactgtgaa 540  
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 atgttgcact acaatTTTTT anggattaca tgcagcaaac tggaggnaaa gcacatctaa 660  
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<210> 5059



<211> 492

<212> DNA

<213> Homo sapiens

<400> 5059

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gggttttctt gtgttggtca ggctgctctt gaactaccaa cctcaggtga tctgcctgcc 240
tcggcctccc aaagtgttgg gattgcaggc gtgagccacc atgcccggcc agttttttaa 300
gaactccttc ttactactca gattactcct ttttaaatag tggtttttaa aaaatatcaa 360
agtagactgg gcacagtggc tcacacctgt gatcccgga ctttgggagg ctgatgcggg 420
ctgatcacct gangtcagga gttcgagacc angctggcca acgtggtgaa tccctgctct 480
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<210> 5060

<211> 801

<212> DNA

<213> Homo sapiens

<400> 5060

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ggaccggcgg cactgggaga taggagaggg tggcgacagt ggcctgacca tcgagaagtc 660  
ctgganggag ctggtgcctg ggcacaagga gatgagccag gagctctgnc accaacagga 720  
ngccctgtgg gagcttctga caccgagctg atctacgtga gaaacttaag atcatgactg 780  
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<210> 5061

<211> 762

<212> DNA

<213> Homo sapiens

<400> 5061

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acagcgagac acctggggat gaagagcttg gatttgaagc ancanttgct gccttgggca 720  
tgaagacaac agtgagcgan gcagacatcc ctcttatgtg aa 762

<210> 5062

<211> 489

<212> DNA

<213> Homo sapiens

<400> 5062

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 agtagagatg agatttcacc atgttgccca ggggtggtttt gaactcttga tctcaggcat 420  
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<210> 5063

<211> 850

<212> DNA

<213> Homo sapiens

<400> 5063

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 gtatggattc ccacctgac ttaccctcac cctcaagaa agcatccagc tttatgatac 180  
 catggctcaa gtctgggaaa ctgggccag ggctcaggaa ttgtgtccag aggaattcat 240  
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 aaatttctga ggactgcccc tatgctgatg tcaaagccct acacactgaa attaccagga 780  
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<210> 5064

<211> 740

<212> DNA

<213> Homo sapiens

<400> 5064

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 agttcaagac caaccgggcc atcatgttga aacaccatct ctacaaaaaa tacaaaaatt 180  
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 gaggttgcca taacgttatt tccttcangg tatatgttca ctttggaaac caaggggcca 660  
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<210> 5065

<211> 786

<212> DNA

<213> Homo sapiens

<400> 5065

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catgttgggg ttcaaacagt gggagccatg cttctgcgaa tgagcctggg gactggggac 720
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actttt 786
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<210> 5066

<211> 838

<212> DNA

<213> Homo sapiens

<400> 5066

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gagagcacag agatggaggt catgcagggt gaatcttcaa cagatacaat attctcaaga 480  
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<210> 5067

<211> 861

<212> DNA

<213> Homo sapiens

<400> 5067

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<210> 5068

<211> 740

<212> DNA

<213> Homo sapiens

<400> 5068

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<210> 5069

<211> 756

<212> DNA

<213> Homo sapiens

<400> 5069

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<210> 5070

<211> 820

<212> DNA

<213> Homo sapiens

<400> 5070

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<210> 5071

<211> 705

<212> DNA

<213> Homo sapiens

<400> 5071

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tcaactctat gttgtttggg ggcactgagg atgatatcaa aaggctagag tgttattttc 180  
tccaatttta cattttggct agtccttgtt gaacacagag cagttttttc caaagttatg 240  
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tgacacatcc cccatagaag tgcatataat ttactggaga agacaggctt atgaacaaat 420  
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<210> 5072

<211> 840

<212> DNA

<213> Homo sapiens

<400> 5072

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<210> 5073

<211> 761

<212> DNA

<213> Homo sapiens

<400> 5073

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<210> 5074

<211> 792

<212> DNA

<213> Homo sapiens

<400> 5074

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 gctacaggag atctaccagg agctgacccg gctgaaggct gcagtgggtg agttgccaga 360  
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<210> 5075

<211> 789

<212> DNA

<213> Homo sapiens

<400> 5075

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 ccaccagaac ttccgacgct tccgctacca ggaggcagca agccctagag aagctctcat 360  
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<210> 5076

<211> 274

<212> DNA

<213> Homo sapiens

<400> 5076

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tgtgaagcgc ctgggtgcaag ctgtactaat acacctaa atgagctcct cctccctcc 240  
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<210> 5077

<211> 814

<212> DNA

<213> Homo sapiens

<400> 5077

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<210> 5078

<211> 831

<212> DNA

<213> Homo sapiens

<400> 5078

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<210> 5079

<211> 734

<212> DNA

<213> Homo sapiens

<400> 5079

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<210> 5080

<211> 706

<212> DNA

<213> Homo sapiens

<400> 5080

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<210> 5081

<211> 720

<212> DNA

<213> Homo sapiens

<400> 5081

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<210> 5082

<211> 860

<212> DNA

<213> Homo sapiens

<400> 5082

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<211> 818

<212> DNA

<213> Homo sapiens

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<211> 799

<212> DNA

<213> Homo sapiens

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<210> 5085

<211> 800

<212> DNA

<213> Homo sapiens

<400> 5085

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<211> 807

<212> DNA

<213> Homo sapiens

<400> 5086

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<210> 5087

<211> 685

<212> DNA

<213> Homo sapiens

<400> 5087

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<210> 5088

<211> 709

<212> DNA

<213> Homo sapiens

<400> 5088

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<210> 5089

<211> 794

<212> DNA

<213> Homo sapiens

<400> 5089

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<210> 5090

<211> 738

<212> DNA

<213> Homo sapiens

<400> 5090

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<210> 5091

<211> 778

<212> DNA

<213> Homo sapiens

<400> 5091

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<210> 5092

<211> 837

<212> DNA

<213> Homo sapiens

<400> 5092

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<210> 5093

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<212> DNA

<213> Homo sapiens

<400> 5093

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gagcanaggg gtcctactg cctgagctgc tgtccaatat ccggcttgcc cct 713

<210> 5094

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<212> DNA

<213> Homo sapiens

<400> 5094

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<210> 5095

<211> 775

<212> DNA

<213> Homo sapiens

<400> 5095

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<210> 5096

<211> 734

<212> DNA

<213> Homo sapiens

<400> 5096

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<210> 5097

<211> 700

<212> DNA

<213> Homo sapiens

<400> 5097

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<210> 5098

<211> 761

<212> DNA

<213> Homo sapiens

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<210> 5099

<211> 761

<212> DNA

<213> Homo sapiens

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<210> 5100

<211> 838

<212> DNA

<213> Homo sapiens

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<210> 5101

<211> 326

<212> DNA

<213> Homo sapiens

<400> 5101

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<210> 5102

<211> 767

<212> DNA

<213> Homo sapiens

<400> 5102

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767

<210> 5103

<211> 884

<212> DNA

<213> Homo sapiens

<400> 5103

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<210> 5104

<211> 849

<212> DNA

<213> Homo sapiens

<400> 5104

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<211> 806

<212> DNA

<213> Homo sapiens

<400> 5105

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<210> 5106

<211> 814

<212> DNA

<213> Homo sapiens

<400> 5106

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<210> 5107

<211> 776

<212> DNA

<213> Homo sapiens

<400> 5107

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<210> 5108

<211> 833

<212> DNA

<213> Homo sapiens

<400> 5108

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<210> 5109

<211> 838

<212> DNA

<213> Homo sapiens

<400> 5109

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<210> 5110

<211> 849

<212> DNA

<213> Homo sapiens

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<210> 5111

<211> 868

<212> DNA

<213> Homo sapiens

<400> 5111

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<211> 778

<212> DNA

<213> Homo sapiens

<400> 5112

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<210> 5113

<211> 783

<212> DNA

<213> Homo sapiens

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cat 783

<210> 5114

<211> 868

<212> DNA

<213> Homo sapiens

<400> 5114

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<210> 5115

<211> 821

<212> DNA

<213> Homo sapiens

<400> 5115

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<210> 5116

<211> 812

<212> DNA

<213> Homo sapiens

<400> 5116

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 agcctcccaa agtgacagga ttacaggggt cagccactgt gcctggcccc tccttaaact 600  
 tcttttccag agactctaga atctttcttt ttggtggaaa acaataaaag atttggcact 660  
 ccacatggaa tgcggcagga gactgcagtg ggtgaactcc cccggtcctt tccagccctg 720  
 ggccctgctg cctgcctgcc tgcacaccac cctgtaagna tctgctgtcc angggacctt 780  
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<210> 5117

<211> 467

<212> DNA

<213> Homo sapiens

<400> 5117

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 agcgtggact tgagagtcag acttgccttc aactcctagc tctaccactt accacctagg 180  
 tgacctcaag ccactttctc agcctttctg agactctgta tcctcatgtg tctcctagag 240  
 tttgtctgat agggctatag tgagaattaa ttgaattaag tgtagtgaga attaagccag 300  
 gtctggagag gcctggctac tggtagtgga ggtaactgag atcaggtatg gagaggactg 360  
 gctcctgggtg agtgagttaa ttgagatgag gtatggaggg acctgtctcc tggtgantga 420  
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<210> 5118

<211> 854

<212> DNA

<213> Homo sapiens

<400> 5118

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 ggctggctct cctcctccg caccgtccac agtgtgtctca atcgctcgcc tccagagctg 180  
 gtcgccgaga ttgtactggg cgacgacttc agtgatcgag accgcattgc tcggaaccgc 240  
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 ggtggactgt tcgccgtgga tcggaagtgg ttctgggaac tcggcgggta tgaccagggc 480  
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 aaggtcccgg ccggagtcag cctggcccgg aaccttaagc ggggtggccga agtgtggatg 660  
 gatgagtacg cagagtacat ttaccagcgc cggcctgaat accgncacct ctccgctggg 720  
 gatgtcgcag tccagaaaaa gcttccgcag ctctcctaac tgcaagaagt ttcaagtggg 780  
 tttattgacg aaagatagcc tggggacctt gncccaaatt tttaccaac ccgtnggaac 840  
 cccccgggtt gcan 854

<210> 5119

<211> 827

<212> DNA

<213> Homo sapiens

<400> 5119

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 ccctaaaata tgcctttgta agattttttt aataaaatca agtttagaaa taatttgaac 180  
 ttttttgggg gatagagttt cagtcttgct gcccaggctg gaatgcaatg gcacgatctc 240  
 agctcaccgc aacctccacc tcctgggttc aagtgatttt tctgcttcag cctcccaggt 300  
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ggggtttcac catgttggcc aggctgattt ctagttcctg acctccggtg atccacctgc 420  
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 ttttttttgg agacggagtc tccctctgtc gccaggctg gagtgcagtg gtgctatcct 540  
 ggctcactgc aacttccgct tcctgggttc aagcgattct cctgcctcag cctccggagt 600  
 agctgggatt acaggcactc cgccgccatg cccagctaata ttttgtattt ttagtagaga 660  
 cgggatttca ccatgttggc caggctggtc ttgaactcct gacctnaagt gttctgccac 720  
 cttggcctcc aaagtgctgg gatgcagatg tgagccacgt catcttggcc tggcctgaac 780  
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<210> 5120

<211> 451

<212> DNA

<213> Homo sapiens

<400> 5120

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 aggctggtat gggtgagagg ttnggtcttg ntgcaaate ttctgaaggc cattccagag 180  
 gagcagttgc cactgccccca tcccctgagc tctgagcatg ggggttcccc tggggagact 240  
 cctggtgaga ggatgccgat ttctgctgat ctgtcactgg gtaccgagga ctgggtgtgt 300  
 ttaaggcaga cagccagggtg aggatcccag ctactggggc ctgctgtcat ctctggggag 360  
 taccgggggg tcangagcct aggggactct tgcacttcac atccagccat gctaattaca 420  
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<210> 5121

<211> 817

<212> DNA

<213> Homo sapiens

<400> 5121

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ccacactgga	cagagagcag	tggcccaa	ataccctcac	tctgttagcc	caagaccaag	180
gactccagcc	cttatcagtc	aagaaacagc	tcagcattca	gatcagtgac	atcaacgaca	240
atgcacctgt	gtttgagaaa	agcaggtatg	aagtctccac	gcgggaaaac	aacttacctt	300
ctcttcacct	cattaccatc	aaggctcatg	atgcagactt	gggcattaat	ggaaaagtct	360
cataccgcat	ccaggactcc	ccagttgctc	acttagtagc	tattgactcc	aacacaggag	420
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atggcttggg	cccagcgggc	actgacacac	cttcaactgg	cactcacagc	ttccgggcat	720
tccttttgac	aaccattgng	gcaagagatg	canactcggg	ggccaaatgg	gaaagcccct	780
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<210> 5122

<211> 831

<212> DNA

<213> Homo sapiens

<400> 5122

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aatcccagca	ttttgggagg	ccgaggtgga	aggatcactt	gagtccagga	gttcaagacc	180
agcctgggca	acatagcaag	ctcttgtctc	tagaaattat	ttaaaactta	gctgggcatg	240
gtggtgtgca	cctgttgtct	cagctacttg	ggaggctgaa	ctggaaggct	gcttgagcct	300
gagaagtcga	ggctgcagtc	agccgaaatt	gtgccactgg	actccagcct	gggcaacaga	360
gtgagaccac	catctcaaaa	aaaaaaaa	aaaaaaaa	gaagactttg	gcacattaaa	420

aaatatagca atatttcac t t g c t a a a a c a a t t a t t t c a c a c t a a c c t a t t c a g a a c a a 480  
 aaatagagaa gaggtaaaaa tagtttctaa gtagccaaat agatgacaga cagtcacatgca 540  
 ttccagatgg aatgggcagt cctgcctgca gcgtcactct ggttttgctt aaatctcata 600  
 cacttcactt gtaagtatct tgnatcttta ttaggatctc actttacctc attttactta 660  
 caagtttaac tagattggna tcctagttac tattttccat agcaaaggag aagaggaagg 720  
 aagtttgta aaggaagtca cacttgacaa aacccaaatt ttaaaaagtg accccttgac 780  
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<210> 5123

<211> 820

<212> DNA

<213> Homo sapiens

<400> 5123

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 tggccttgaa cttgttagct caagtgatcc tgcctcagcc tcccaaagtg ttgggattct 180  
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 gttttccttt ttgtcccagg ctggagtga atggcatgat ctgggtcac tgcaacctcc 300  
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 cctgccacca tgcccggcta atttttgtat ttttagtaga gatggggttt tgccatgttg 420  
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 ctgggattac aggcgtgagc caccgtgcct ggcctccagc tgaattcctt tgctttaagt 540  
 gtatatatgt ctccaggggc tgtcttcatt tcagcaggct gtcctggcct gaaggaggca 600  
 cccctaggct ccttctcttg aacattccta gcctaggagc tgggtggtag gaggtagcat 660  
 gctgggaagc aggcacattc ctatactgg ggtcccaaga gagccattgg gtgggtgggc 720  
 agacagacat acagtttaat anggccaggg agaaactgnc ttccttcttt gctcttttag 780  
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<210> 5124

<211> 610

<212> DNA

<213> Homo sapiens

<400> 5124

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tattcccact ctcttccagc acaacatgcc tttctggagg atcacaacc atggagacct 180
agtatccctt caccaggctt tagagcttga ttttctctaa gaactggaat gaggagcctt 240
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tgctaagagt gagctgcagc cccgtgttca tctcataca gaagcaggga cagttggata 540
gagagaacaa tggactcact gaagctacag tgcttttaat tnttctgtgt tntggttttg 600
gtnttttgtt                                     610

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<210> 5125

<211> 736

<212> DNA

<213> Homo sapiens

<400> 5125

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cagcggcgct tccgggatgg tgcctacaac atgggtccgtg cctacaccac tgggtccccg 120
ggaagccgag aggcccggga cagcctggca gaggccactc gggggcatcg cgagtacacg 180
gagagcatgt gtctgctgga gagcgagctg gaggcacagc tgggcgagtt tcctctccga 240
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aaatatgggc gtcagcgctg gaaactacgg ggccgaattg agggtagtgg aaagcagggtg 360  
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 acagaactga agggcctggc caaccatgtg gttgtgggca gtgtctcctg tgagaccaag 480  
 gacctgtttg ccgccctgcc ccaggttgtg gctgtggata tcaatgacct tgggtaccatc 540  
 aagctcagcc tggaagtcac atggagcccc ttcgacaagg atgaccagcc ctcagctgct 600  
 tcttctgtca acaaggcctt cacagtcacc aagcgcttct tcacctatag ccagagccca 660  
 ccggacacac cctnacttcg ggaacaggct ttctataaca tgcttgcgac ggcagganga 720  
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<210> 5126

<211> 623

<212> DNA

<213> Homo sapiens

<400> 5126

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 cgaccctgac cgcggggtgg gccggacca tgaaatctcg gtccggaact cgggctcctg 180  
 cctgtgcctg cctcgcttca tgcggctgac tttcgtgccg gagtccttgg agaacctcta 240  
 ccagacctac ttcaaaaggc agcgccacga gaccctgctg gtgctgggtg tctttgcagc 300  
 cctctttgac tgctacgtgg tggatcatgtg tgctgtggtc ttctccagcg acaagctggc 360  
 tcccctcgcc gtggctggaa ttggactggt gttggacatc atcctcttcg tgctctgcaa 420  
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 cataaccgcc cagatcttct cctacctggg cctgaacttc gcgcgtgcc acgcggctag 540  
 tgacacggtg ggctggcagg tcttctttgn cttctncttc ttcacacgc tgnccctcag 600  
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<210> 5127

<211> 735

<212> DNA

<213> Homo sapiens

<400> 5127

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cagctcttca tgcagtttat tgatggtcga ttagatcttc tcaattccgg cgaaggtttc 180
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aagctccgag aagaccggcg gccaatcaca gtccactttg gacaggtgcg cccacctcgt 540
ccacatgttg ttaagagacc aaagagcaac atcgcagtgg aaggccggag gacgtctgtg 600
cccgagccct gagcaaaaca ccattgcaac accagctaca cttcacatnc tacagaaaag 660
cattacccat tttgcgggna agttcccgac aanganctgg acctcttcat cacattgact 720
tacgccgttg ctttt                                     735

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<210> 5128

<211> 840

<212> DNA

<213> Homo sapiens

<400> 5128

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cttcttacag atactccaag tatcacagct aaattaatta gtgaacaaaa agatgacaaa 180
gaaaagaaaa accatgaaga gaaagaaaaa gttaaagcgg aaaatggatt tcaagacaat 240
tacagtgttg ttgttgctc tgggctgaag tctcaatcta aacgtgctgt gtcagctaca 300

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ccacctcgcc caccatccag gagggggagg acaatacctg ataaaatagg aagtacttca 360  
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 caagtttttg cagaaatggg tggactggct cttattgctg aaagactacc catgctatat 780  
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<210> 5129

<211> 545

<212> DNA

<213> Homo sapiens

<400> 5129

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 cccacactca tgcagtgcac cctcacagc cccaccctt ggcagtgaca tttggatttc 300  
 cagggccttt cctgacctt tagagacatc ctctccggc caagtcctgc aaggagact 360  
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 aggcctattc ccggtgatct aagcacacag aagcaggctg gtacttangg aagaaggcac 480  
 cagtgtatgc cagagcttan gatggcgtga ggaccaaag gaaagatnga tattgaaagt 540  
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<210> 5130

<211> 770

<212> DNA

<213> Homo sapiens

<400> 5130

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catgtggaac ctaccctttc tcttattata atgttggtgt taaatgtgcc tcctactcat  180
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tatatgctta catctatggc agtggaaaaa ctcttctgt ggntaaagct ttgtaaagat  720
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<210> 5131

<211> 435

<212> DNA

<213> Homo sapiens

<400> 5131

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caaaaaattg ggtgggcatg atggcactgg cctgtagtct gagctcggga ggatcacttg   60
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acagagcaag accctgtctc aaaaaacaag aaaaatttgg ttcttttct ttttttttga  180
gacataatct cactctgttg cctaggctgg agtgtaatgg cacgatctcg gctcactgca  240
acctccacct cctgggttta agtgattctc ctgcctcagc ctcttgagta gctgggatta  300

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caggtacatg ccaccatgcc cagctaattt ttgtatTTTT agtagagatg gggtttcacc 360  
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agngctggga ttaca 435

<210> 5132

<211> 835

<212> DNA

<213> Homo sapiens

<400> 5132

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tatagaactg gaaaagcaac catttccaaa aaagtttctt ttctctgaat ttgtgccaaa 180  
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tatcaccaac atcacaaatg tgcttccaga gacagttcac actaccaagc tctatggcac 480  
cacaactttt aaggatgcta gacatgcagc tgaagaagag atttatacta acttaaacca 540  
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caaagctagt gattacctgg tagacctcat tgcctttctt cgtagcacct ttgctgtatt 660  
cacacacctt cctggaaagg tggcccagac agcgtgtatg tcagcttgca agcatttagc 720  
cacatncttg atgcaacttt tgntggaagc tgaagtgcng cagctcacct tgggagcatt 780  
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<210> 5133

<211> 664

<212> DNA

<213> Homo sapiens

<400> 5133

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 gcaagatggg gtggcatgtt gtcattctca gccatttttt ttttcttcca ttgcattata 180  
 tttggaacag gcacgatggg gacatctgta atcccaacta cttgggagggc tgaggctaga 240  
 ggattccttg agcccaggaa ttcaaggcta aagtgtgcta tgatcacacc tgtgaatagc 300  
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 tgcgtgcagt ggcttatgcc tgtaatccca gcactttggg aggctgagggc aggttgatca 420  
 cctgaggtca ggagttcaag accagcctgg cgaacacagt gaaaccctgt ctctactaca 480  
 aatataaaaa aaagaaaaaa cattagctgg atgtggtggt gcatgcctgt aatcccagct 540  
 acttgggagg ctgaggcagg agaatcgctt gaatctggga ggcagagggt gcagtgagcc 600  
 aagatcgac cattgcactc cagcctgggt gatagaatga gactctgtct caaaaaaaaaa 660  
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<210> 5134

<211> 716

<212> DNA

<213> Homo sapiens

<400> 5134

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<210> 5135

<211> 575

<212> DNA

<213> Homo sapiens

<400> 5135

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<210> 5136

<211> 776

<212> DNA

<213> Homo sapiens

<400> 5136

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<210> 5137

<211> 791

<212> DNA

<213> Homo sapiens

<400> 5137

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<210> 5138

<211> 757

<212> DNA

<213> Homo sapiens

<400> 5138

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<210> 5139

<211> 821

<212> DNA

<213> Homo sapiens

<400> 5139

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<211> 840

<212> DNA

<213> Homo sapiens

<400> 5140

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<210> 5141

<211> 749

<212> DNA

<213> Homo sapiens

<400> 5141

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<210> 5142

<211> 845

<212> DNA

<213> Homo sapiens

<400> 5142

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<210> 5143

<211> 668

<212> DNA

<213> Homo sapiens

<400> 5143

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<210> 5144

<211> 749

<212> DNA

<213> Homo sapiens

<400> 5144

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<210> 5145

<211> 736

<212> DNA

<213> Homo sapiens

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<210> 5146

<211> 771

<212> DNA

<213> Homo sapiens

<400> 5146

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<211> 670

<212> DNA

<213> Homo sapiens

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○

ccccaccacc atcaaaaggc ttggacacct ccatcatcgc tgatgagtac tgaatgttgg 600  
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<211> 731

<212> DNA

<213> Homo sapiens

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<400> 5148

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<210> 5149

<211> 571

<212> DNA

<213> Homo sapiens

<400> 5149

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<211> 730

<212> DNA

<213> Homo sapiens

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<211> 796

<212> DNA

<213> Homo sapiens

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<210> 5152

<211> 719

<212> DNA

<213> Homo sapiens



<400> 5152

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 ggtgatctgc ccacctggc ctcccaaagt tctgggatta caggcgtgag ccacggtgcc 180  
 cagcctggct cctgtttttt gagacggggt ttcacctgt tcccaggtt ggagtatagn 240  
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 aatttttgta gagagaatct ctctctgtt cacaggctat tcttgaactc ctaggctcaa 420  
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<210> 5153

<211> 856

<212> DNA

<213> Homo sapiens

<400> 5153

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 cgaggtatga agaagcaa atcattgacgac ttcacaccc gaaacaaata tctattggca 420  
 gccaggctca ccagccagaa gttgttccat gaactctgcc ctgtgaaacg gtcgcatcga 480  
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 aacttggccc tgtttt 856

<210> 5154

<211> 775

<212> DNA

<213> Homo sapiens

<400> 5154

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 tggcagccag gtgcgctatt cagcagccac aagccctaca agtaattaac caggggcacc 420  
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<210> 5155

<211> 670

<212> DNA

<213> Homo sapiens

<400> 5155

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<210> 5156

<211> 851

<212> DNA

<213> Homo sapiens

<400> 5156

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cctgtccata acagagtcac cctggaactg agtaatggct ccgtgggttag gatcactatt  300
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ccaaaagaaa tagcagttca gatgcttgtc aagtgggtaca atgtccacag tgctccagga 420  
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 gattcttcta cactttctct tactcacata cctgcaattt ttttcggtct tcacttgggt 780  
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<210> 5157

<211> 715

<212> DNA

<213> Homo sapiens

<400> 5157

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 ctcagctgtt ggaagggcct tccagcccct ctcaaaccct ctcactcat gatagtgaca 180  
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 gcagtgaaga tgaggatgaa gatgaggttg atgctaatag ctctgactgt gaaccagagg 540  
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 aggaccggag tgaggatgag gaagatgaac attcagagga ggtagaaaca agtggaagtt 660  
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<210> 5158

<211> 491

<212> DNA

<213> Homo sapiens

<400> 5158

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aggtgagatg cctgcggggg aagcagcagg agctaccacc tccaccagc cactgcattc 180  
tgagcagcg cttcccaaac ttcagtgtgt gcaccgatca cctagggcct tttttttttt 240  
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tgcctggcctt gtttgttttg tattaattac atttttatag agagagatgg ggtcttactt 420  
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<210> 5159

<211> 758

<212> DNA

<213> Homo sapiens

<400> 5159

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gaccgaattc actaccagtc aaccacact acaagaaaca tcaaatgagt cctccaagca 180  
gaaggaaccc aataccagat gaaaatccag atctccacga ggaaatgaag aacaccagaa 240  
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cttggaatcc actgaaatcc tgggtaggga agctccagta ccaccaactg gaaagactgg 360  
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gatggggact cgactcacct tcgccagcca caggaggacc tccagacgag gttagggtcga 480  
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<210> 5160

<211> 649

<212> DNA

<213> Homo sapiens

<400> 5160

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 gctccccggc cccgggggat accataagca cagaggtggc ctctttaatc aggggcttcc 540  
 cagggagggt ctgaggctgg gctgcgggat tactcctttc ttgggaagca ngcaggggtg 600  
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<210> 5161

<211> 742

<212> DNA

<213> Homo sapiens

<400> 5161

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tcctctggca	caccctccgc	tctggggccc	cactctcacc	tcgttcagtt	gacctgaagg	180
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ggggaggtgt	tggcaaggca	gctgcaacaa	caagttcacc	ccgctttgga	ttttaaaagg	360
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ctgggactcc	cggggagcca	tgcaccccc	acttgggtgg	tgggtggcang	gcaggggagt	660
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<210> 5162

<211> 743

<212> DNA

<213> Homo sapiens

<400> 5162

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ccagttgctg tttttaacta agtgatttac tttgtgctgg agctgagctg cgccaagctg 480  
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<210> 5163

<211> 781

<212> DNA

<213> Homo sapiens

<400> 5163

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 gctcacgcct gtaatcctag caatttggga ggcgataaga attattgaaa tgcagtaaga 600  
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 ctacactact cacacaagtt ccacattctg tatanttaaa atggccagca gggcggaggg 720  
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<210> 5164



<211> 735

<212> DNA

<213> Homo sapiens

<400> 5164

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<210> 5165

<211> 767

<212> DNA

<213> Homo sapiens

<400> 5165

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<210> 5166

<211> 749

<212> DNA

<213> Homo sapiens

<400> 5166

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<210> 5167

<211> 832

<212> DNA

<213> Homo sapiens

<400> 5167

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 gcacttaatt attttgattt ctctttctct atcctatgaa ttcttgTTTT atttttatcg 240  
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<210> 5168

<211> 775

<212> DNA

<213> Homo sapiens

<400> 5168

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<210> 5169

<211> 809

<212> DNA

<213> Homo sapiens

<400> 5169

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<210> 5170

<211> 811

<212> DNA

<213> Homo sapiens

<400> 5170

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<210> 5171

<211> 865

<212> DNA

<213> Homo sapiens

<400> 5171

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<210> 5172

<211> 780

<212> DNA

<213> Homo sapiens

<400> 5172

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<210> 5173

<211> 874

<212> DNA

<213> Homo sapiens

<400> 5173

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tcctttaaaa caaatgaaaa gggggagtaa tgggacatac cccatacttt caataagtag 840  
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<210> 5174

<211> 730

<212> DNA

<213> Homo sapiens

<400> 5174

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<210> 5175

<211> 800

<212> DNA

<213> Homo sapiens

<400> 5175



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<210> 5176

<211> 757

<212> DNA

<213> Homo sapiens

<400> 5176

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<210> 5177

<211> 786

<212> DNA

<213> Homo sapiens

<400> 5177

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<211> 863

<212> DNA

<213> Homo sapiens

<400> 5178

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<211> 747

<212> DNA

<213> Homo sapiens

<400> 5179

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<211> 743

<212> DNA

<213> Homo sapiens

<400> 5180

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743

<210> 5181

<211> 745

<212> DNA

<213> Homo sapiens

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<210> 5182

<211> 730

<212> DNA

<213> Homo sapiens

<400> 5182

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<211> 788

<212> DNA

<213> Homo sapiens

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atgatcccat gagccacaag tnaanggggtt aatggtttgg cggggccttg ggcaccagga 780  
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<210> 5184

<211> 727

<212> DNA

<213> Homo sapiens

<400> 5184

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tctctaattg gaaaatgtat tctatgaaaa taattttttt aaataaaatg ttgtataaaa 180  
aaaaaaaaaa aaagatgaac tgtccctgca tcggcctaaa ggtatcagtg ctcaaaatcc 240  
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gctcttgaat cagtcaagcc aggctgttgc cttcttcttc ctctacaacc atgcatgcca 480  
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ggcttccctc tgcctctcca agcacaattc tgnctccttt gctggctctt acacatgtcc 660  
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cctcact 727

<210> 5185

<211> 770

<212> DNA

<213> Homo sapiens

<400> 5185

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 atattgggtg acatggtttg gagacagctc agtgcagaga taagagaaag aagttttggt 180  
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 agcccatacc attgtcaata atagtatgaa atttgacatc tcctaatcaa ctttatatct 540  
 cacacatatg gagtgatgac aaataatgcc ttaggtcacc acattagttg gagaaatgta 600  
 gcattaaatt accgctctta tagtaaatta ccatcaaata atgaatttgt gccaaagtaca 660  
 agagcctgaa ttccaacaa tagattataa taccattggn gaagttaa atgcagatttg 720  
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<210> 5186

<211> 780

<212> DNA

<213> Homo sapiens

<400> 5186

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 ctcaggatgt ggttttctcc atcatggaaa tgttttggat agtttctcag ctgcatctga 180  
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 agccaggcaa gaaggagaag gaacgcggcg agattgaagt caccatccag ttcacgcgca 420



acaacctgag cgccagtatg ttgacctgt ccatgaagga caagccaagg tctcccttca 480  
gcaagatcag ggacaagatg aagggcaaga agaagtatga tctggaatct gcctctgccca 540  
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cctcgcttgg gctcggacaa gcacccttgt cctcagccag ccgggagctt ggcctaccan 720  
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<210> 5187

<211> 701

<212> DNA

<213> Homo sapiens

<400> 5187

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cgatgaactg gacagtgcaa agcgatcgga ggacagggag aaggagctc tgattgagga 180  
gctcttacag gcaaaacagg atcttcaaga tctgctgatt gccaaagagg ggcgagaaga 240  
cctcttgaga aagcgagagc gtgaactcac cgccctgaag ggagccctga aagaagaggt 300  
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agaaatcgac agttagagga ggcccttgtg cacgtcagaa aggaagaaaa agaancgtgtg 660  
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<210> 5188

<211> 734

<212> DNA

<213> Homo sapiens

<400> 5188

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agtgaatctg tcagtgaaga tgatgaggaa gaagagaagg gtggcaccca tgtcaatgat 180  
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cctgaagaag tccagcctcg gtctttaaag ttcacatctt gaatgatgag cacaaggcga 600  
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ggtaccaaga tgtacagact tctcactctt gaanaaatca tttgncccag gtagaccgca 720  
anaaaacccc agaa 734

<210> 5189

<211> 680

<212> DNA

<213> Homo sapiens

<400> 5189

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ttccgctcct cgctcgaatg aagactttgt cctcctgctc acctacgtcc tcttcttgat 180  
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cttggtgcc aatggctggg tgttcctgnt ggcttatgtt agtcccgagt nttggctgct 420  
 caciaagcaa cgaaacccca tggattatcc tgttgaggat gctttctgta aacctcaact 480  
 cgtgaagaan agctatgggtg tggagaacag agcctactct caagaggaaa tcaactcaagg 540  
 ntttgaagag acaggggaca cgctctatgc ccnctattcc acacattttc agctgcagaa 600  
 ccagcctccc aaaaggaatt tttcattcca cggcccacgc ttggcccaac ccttaciaag 660  
 actatgaang taaagnanga 680

<210> 5190

<211> 745

<212> DNA

<213> Homo sapiens

<400> 5190

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 ttaatgatag gagactttca ggtctccgtt gattctatta tactaatcct aaaatagcat 180  
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 cgggcatgag ccaccatgct cggctaattt ttgtattttt agtagagaca gggtttcccc 600  
 atgttggcca ggctgggtct gaacttctgg cctcaagaga tccaccgggc tnggccttcc 660  
 aaaatgctgg gattcaggcg tgagccaccg ncaccggcct gcatttcttt atagaagtcc 720  
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<210> 5191

<211> 669

<212> DNA

<213> Homo sapiens

<400> 5191

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tgtccttcgt cccagccagc tttgtcgtat tcctgatcca ggagcgggtc agcaaagcaa  180
aacacctgca gttcttcagt ggagtgaagc ctgtcatcta ctggctctct aattttgtct  240
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cagcctatgt ggtgtctacc agcgtgaacc tcttcattgg cattaatggc agcgtggcca  480
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caggcaatgg ctgatgccct ggaaaggntn ggggagaatc gctttngca ccattatctt  660
gggacttgg                                     669
    
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<210> 5192

<211> 785

<212> DNA

<213> Homo sapiens

<400> 5192

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ttagagaaaa gaaagaagcg gcgggatcag cccttggaaac agagcaactc tgatgtagag  180
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gtgaataccc ggaggtcttc ccaagcaggg gatattgctg cagaaaaact agtccccaag  360
    
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ccacctccag caaagccttc taggccccgg ccgaagagtc gaatttctcg gtacaggacc 420  
 agttcagccc aaagactaaa gcgtcagaag caggccaatg cacagcaggc agaattgtca 480  
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 ctagacagtt caggagaaaa caggccatta acagggtctg acccactgtg gtgtcaatta 600  
 ctggatccca tgtcaaccgt gctgcatcta aatccccaaa accaaaaagt ntctagttac 660  
 agaatggttg aatgacaaag cagagaagca agaatgccct gttgagtgcc tttcgtatca 720  
 caacggatcc actgtctggc aacgacccta acatgttcca ggncttatcc ttnccegtta 780  
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<210> 5193

<211> 882

<212> DNA

<213> Homo sapiens

<400> 5193

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 aactggaaac agacaaagaa acactctcct tctgccacat ttgttttgag ctaaataattg 180  
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 tgaattcgat gactcttggt gangtagaac aactgaatgc aaaagctcta cgcaattccg 780  
 gaagtttttg aaagtacctt accaagtgcga agaaaagatc ttggcctaca gtcattgtccg 840

⊖

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882

<210> 5194

<211> 690

<212> DNA

<213> Homo sapiens

<400> 5194

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⊖

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cctctgccag cagaggtgtc aacagaattc cagtcatgtg agccttccag gagtgtatag 300

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caacaatgga gacactcatc tgtttatttt tgtaaccttc agaatgaatg ctatgattcc 420

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aaactttttt ctcacatact ttagtctctt ttctggttct tgnctctgct ctncctttaa 660

○

aaggtgatta tcatccttct ttctncctca 690

<210> 5195

<211> 641

<212> DNA

<213> Homo sapiens

<400> 5195

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<210> 5196

<211> 684

<212> DNA

<213> Homo sapiens

<400> 5196

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 ggactactgc ctgcacgtgc tcaaataact gctggaatat tggaagagcc aacagaatga 180  
 cgaggagcct gtggctacca gccagttgct gaaaccacat actacctct cccacactga 240  
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<210> 5197

<211> 729

<212> DNA

<213> Homo sapiens

<400> 5197

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<210> 5198

<211> 882

<212> DNA

<213> Homo sapiens

<400> 5198

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<210> 5199

<211> 888

<212> DNA

<213> Homo sapiens

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<210> 5200

<211> 793

<212> DNA

<213> Homo sapiens

<400> 5200

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<210> 5201

<211> 766

<212> DNA

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<400> 5201

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<210> 5202

<211> 788

<212> DNA

<213> Homo sapiens

<400> 5202

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cactatgggtg attacaccta catggctact aaactgtggg ctgggccaga cccatccctt 720  
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<210> 5203

<211> 802

<212> DNA

<213> Homo sapiens

<400> 5203

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<210> 5204

<211> 725

<212> DNA

<213> Homo sapiens

<400> 5204

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<210> 5205

<211> 662

<212> DNA

<213> Homo sapiens

<400> 5205

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cgattcaaaa tggttgaaag aaccatactt tgttcaagcc gtggattacg gagattatat 600  
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<210> 5206

<211> 746

<212> DNA

<213> Homo sapiens

<400> 5206

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<210> 5207

<211> 708

<212> DNA

<213> Homo sapiens

<400> 5207

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gctcagccca ggggtggggc ttgctgcttg caaagagcag cccaccctcc tgtactgcca 360  
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<210> 5208

<211> 645

<212> DNA

<213> Homo sapiens

<400> 5208

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<210> 5209

<211> 723

<212> DNA

<213> Homo sapiens

<400> 5209

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723

<210> 5210

<211> 710

<212> DNA

<213> Homo sapiens

<400> 5210

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 aaaatcagct ggttctgctg cttggtttca acaccttga tttcattaaa gtgttgccgc 180  
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 agtggaaaag ctgcaaaagt atgcccaggc tgggtttgan ggcttcaaaa cacttgaatc 660  
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<210> 5211

<211> 816

<212> DNA

<213> Homo sapiens

<400> 5211

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aatttaaggc agatttcaag ctgatgtgtg ataatgcaat gacatacaat aggccagata 660  
ccgtgtacta caagttggcg aagaagatcc tttacgcagg ctttaagatg atgagcaaac 720  
cggcagctct tttgggccat gaagatcngc tggttganga acctgtccct gaagttgtcc 780  
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<210> 5212

<211> 772

<212> DNA

<213> Homo sapiens

<400> 5212

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<210> 5213

<211> 700

<212> DNA

<213> Homo sapiens

<400> 5213

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acacagcaca gctgtgaggg caggagccag ccctggagtg tgccccangg aagacacagc 660  
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<210> 5214

<211> 659

<212> DNA

<213> Homo sapiens

<400> 5214

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<210> 5215

<211> 812

<212> DNA

<213> Homo sapiens

<400> 5215

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<210> 5216

<211> 660

<212> DNA

<213> Homo sapiens

<400> 5216

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<210> 5217

<211> 774

<212> DNA

<213> Homo sapiens

<400> 5217

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 cggcggaaga aggaagagag tggagcagac caggagttag ctaaaatgct tctggccatg 600  
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 cagaccaca caaccagaaa aagaaaatga anaaaagagt gaaggatgag cttccaaact 720  
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<210> 5218

<211> 780

<212> DNA

<213> Homo sapiens

<400> 5218

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 gttagggagc tatttttggt ttgtccttc actttccctc tgtcttcctt ctttatactt 240  
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<210> 5219

<211> 715

<212> DNA

<213> Homo sapiens

<400> 5219

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actattactg ggtataaaaag ataattctgag agatacttgg gcctatgaac tgctagaatc 660  
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<210> 5220

<211> 755

<212> DNA

<213> Homo sapiens

<400> 5220

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gattccgtga tgaatatctt taaagacaga aactttgaca gctgttgcat ctgtgcctgc 180  
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aatgcgttgg agcangggcg gcagtatgtg gataacccca ctgggtgaaa agtggacgaa 660  
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<210> 5221

<211> 733

<212> DNA

<213> Homo sapiens

<400> 5221

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gagctacgtt ctgcttttca gttgctataa tattagcctg ggtctgctcg taccagctgt 180  
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ttgcagttag ctgagatcat gccagcctag gcatcaacag cgaaactcta tcccaaaata 480  
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ctgtagcatg tatttgctac tagaggcagg caaggtcata acctanggtg agctttgggt 600  
tattaattca aagaccaggt gtctaaatcc tcatctgtaa aatggggacc aaattatctg 660  
aacttcaggt cactggatgt ggggaccant gaacctgctt ggggtgtgaaa acccnttggg 720  
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<210> 5222

<211> 583

<212> DNA

<213> Homo sapiens

<400> 5222

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cccattttca tggctctacc tgcctacca actttttttt ttttttttgc caatttctgg 180  
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tgaccctttc cctggcccag caaaccaaga gggcgtgaac aagccagtcc cgctacctgg 480  
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<210> 5223

<211> 839

<212> DNA

<213> Homo sapiens

<400> 5223

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 aggggggtgta cagaagtgtt ctacttgtgc aaattgtttt cttttttatg tcatcaattc 240  
 tgaaaacgta ggcttattac aggaattttt cccccatat atttttgagc ctcatgcaat 300  
 tttgtatagc agtagccagt gaagttatcc atattgcttc ctctgatata gtctctgagt 360  
 caatttgttt taatgtttta aaacttattg cctacttttc cttgacactt acatgttcgg 420  
 cgtttcagtg gaagataaaa tgaagaaact tgatttccac tccactagaa acaggctatt 480  
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 ttctctcata aggcacattt tttncacact ttttaatttg gttttacca ttaaagtagt 780  
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<210> 5224

<211> 745

<212> DNA

<213> Homo sapiens

<400> 5224

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 tattgttgat atgtgtttta agtcttttta agcctatgct cccccatttc cttacacttg 360  
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 ccctctgcct ctgtgtttcc tgcacgtggg cagtttagatc ctgagatggg atcaggctcc 480  
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gctgatgatg cttgatgcca ttcttggcct tttttgcttt tattttttgt agttcttaag 600  
 gggtttaaaa aatcgtggca taaggtaatg caaaaagggtg tccatgtgtt aaacgtacaa 660  
 ctagacggac tctgcagtgt gccacctgt cctgctgctg gangccattt gangagccaa 720  
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<210> 5225

<211> 526

<212> DNA

<213> Homo sapiens

<400> 5225

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 ctttagccct ttattaaaag tgacagcaga cccagcacgg tggctcatgc ctgtaatccc 240  
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 gctcgcacca ctgcactcca gcctgagtga cagagtgaag ctcagtctca aaaaaaaaaa 420  
 aaaaaaaaaa gtggcagtag tgggtggggga gacccccatc ccccttgctg gggtttccta 480  
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<210> 5226

<211> 713

<212> DNA

<213> Homo sapiens

<400> 5226

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tgatgatttt atactgtacc ttgctggcca gtgcacaaag tgaagctgaa aaggaaagga 180  
 ttatgggaaa gatggaagct gaccagagc tatccaagtt cctctaccag cttcatgaaa 240  
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 ggcaggttct ggacttggag gacctggttt ttaccaagg gagccacttt atggccaata 420  
 aacgctgtca gcttctgat ggatccttcc gtcgccagcg taagggtat gaagaggtgc 480  
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 gtaagctcta ccgtgctgcc cttgagacgg ctganaatct gctgctgtgt gctcctactg 660  
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<210> 5227

<211> 699

<212> DNA

<213> Homo sapiens

<400> 5227

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<210> 5228

<211> 737

<212> DNA

<213> Homo sapiens

<400> 5228

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tncatcctga tgangca 737
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<210> 5229

<211> 867

<212> DNA

<213> Homo sapiens

<400> 5229

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<210> 5230

<211> 536

<212> DNA

<213> Homo sapiens

<400> 5230

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<210> 5231

<211> 682

<212> DNA

<213> Homo sapiens

<400> 5231

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<210> 5232

<211> 560

<212> DNA

<213> Homo sapiens

<400> 5232

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catggccaga tcctgggcag ggaaatgatc ctttcaggag acaaccagag cccctcacca 180
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<210> 5233

<211> 770

<212> DNA

<213> Homo sapiens

<400> 5233

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 caaaggaagg gcactacaac cacaaccaat atcagtaaag ctttggaaga cctctgctac 720  
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<210> 5234



<211> 689

<212> DNA

<213> Homo sapiens

<400> 5234

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<210> 5235

<211> 719

<212> DNA

<213> Homo sapiens

<400> 5235

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<210> 5236

<211> 733

<212> DNA

<213> Homo sapiens

<400> 5236

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gcatggaacc agaggaagaa aatggcagag aataccaatt tgatgtttcg cagagtacta 660  
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<210> 5237

<211> 765

<212> DNA

<213> Homo sapiens

<400> 5237

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aagcagcatc atcttatgtc tacccaatgg tttgtgtggt ggnttanaga gctactgcag 720
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<211> 759

<212> DNA

<213> Homo sapiens

<400> 5238

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<210> 5239

<211> 812

<212> DNA

<213> Homo sapiens

<400> 5239

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812

<210> 5240

<211> 785

<212> DNA

<213> Homo sapiens

<400> 5240

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<210> 5241

<211> 804

<212> DNA

<213> Homo sapiens

<400> 5241

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<210> 5242

<211> 866

<212> DNA

<213> Homo sapiens

<400> 5242

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 gaccgaagac tcagcaactc cagcctctgt agcattgaag aagagcaccg aatgggtgtat 180  
 gaaatgggtac agcggattct cttgtcaaca cgaggttatg tcaacttcgt gaatgaagta 240  
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 atactactca ggataacaga actgtcatgc agaagccaaa ggataaacga ataaaggact 780  
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<210> 5243

<211> 842

<212> DNA

<213> Homo sapiens

<400> 5243

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<210> 5244

<211> 766

<212> DNA

<213> Homo sapiens

<400> 5244

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<210> 5245

<211> 746

<212> DNA

<213> Homo sapiens

<400> 5245

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<210> 5246

<211> 744

<212> DNA

<213> Homo sapiens

<400> 5246

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<210> 5247

<211> 712

<212> DNA

<213> Homo sapiens

<400> 5247

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<210> 5248

<211> 857

<212> DNA

<213> Homo sapiens

<400> 5248

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<210> 5249

<211> 686

<212> DNA

<213> Homo sapiens

<400> 5249

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<210> 5250

<211> 646

<212> DNA

<213> Homo sapiens

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<210> 5251

<211> 733

<212> DNA

<213> Homo sapiens

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 ccatgccctg caggaggggc aatgcccatc tatctgtcaa ccaggctgca gaccttgacc 660  
 cacatgtncg ggagcctgta tgcttgccc cctctaccct tgagtgccca ggangggatc 720  
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<210> 5252

<211> 668

<212> DNA

<213> Homo sapiens

<400> 5252

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 tggtaaagga gaagttgggc ctgaagaagt tagtcctcac ccaggagcag aagaccatgt 180  
 tgttggattg gaatgactcc atccctgaga gtgtgcacct caaagctggg gagcgaattt 240  
 cccagaaaag tgctgagaat ggtagaggag gccgtgtgct aaaaccagtc cggcccctgc 300  
 tgctccctag ggcagcagga gagcccctgc caaccagag aggggctcag gagaagatgg 360  
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 ggctcatagc caatgccatc cgaaggtctc tagagcccct cctttccaac tctgaaggcg 480  
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cattcagcct tcggaaaacc aattccaata aagacgggga ccagcattcc cctgggagaa 600  
accagtcctc agcctttacc ctncctgaccc tgccttcgac ccacagtttg cccaatcggn 660  
catncaag 668

<210> 5253

<211> 690

<212> DNA

<213> Homo sapiens

<400> 5253

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gggttttaggt ctagttattc atggattctg cataggagct cagcctctga taagatctgt 180  
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tgggatacat gtataagatg tgcaggtttg ttacacaggt aaacgtgtgc catggtggtt 480  
tgctgcacct atcaacccat cacttaggta ttaagccctg catccattag ctatttttcc 540  
tgggctctcc ctctaccgc tccaccccca caacaggctc cagtgtgtgt tgtttccatc 600  
cctgtgccat gtgtttctcat tggtcagttc acacttgtaa gtganactgc ntggngtttg 660  
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<210> 5254

<211> 781

<212> DNA

<213> Homo sapiens

<400> 5254

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tcaactcagt agcagtgaag atgctgattc tgcatcagaa ttagctgact ctgaaggagg 180  
tgaggagtat aatgccatga tgaataactg ctttcgtgtg aatctcactt tagctgattt 240  
ggaacaattg gctggcagtg atctgaaggt tccaaatgaa gataactaaga gtgatggacc 300  
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acatgcaaag aaggcgaatg gccaaactat attcagctca aaaaagacag acccttttga 720  
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c 781

<210> 5255

<211> 755

<212> DNA

<213> Homo sapiens

<400> 5255

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cccagtcctt tcctgcagca acacccccca cgcagaagcc ccctcggatc atccgcccc 180  
gccctccttc tcgttcagg gctgcccagt cccagggcc tccccacaat ggctcctctc 240  
cacaagaact accccgaaac tccaatgatg caccaacccc aatgtgact cccatcttct 300  
gggagcccc agctgcatcc ctcaagcccc ctgctctttt gccccctcg gcttctagag 360  
ccagcctcga ctcccagact tcccagact caccttccag cacccccaca cctagtccag 420  
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cgtctgggtc accctgcacg cctctgctcc ccatggctgg agtcctggct cagaatggct 540  
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 gccgggctca ggatgcagat gccccggagc caggctcttca agcgagagca gatgtgaatg 660  
 gggagagaga agctccccn acccggagtg ggtccaggag acgngttca agtgagtgtg 720  
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<210> 5256

<211> 724

<212> DNA

<213> Homo sapiens

<400> 5256

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 tgctacctgc tgctcagccc gaggacgggg gcgagtttgt atgtgatgct ggagatgact 180  
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 gctccctgga tctgcatttt ggggctccag ggcgctgga gctgcgctgt gaggtggccc 300  
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 tgcagctggg tgccgagggg cccacccgca ccctgaccct gccccacgcc cagcctgagg 420  
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 ctgagcctcc agtcagttc cttgctctag agacaactcc aagcccgtc tgtgtggccc 540  
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 gccacaatgg ggggcccgtg caggaggcna gggcctanag ctccatgccg agggcccccg 660  
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<210> 5257

<211> 740

<212> DNA



<213> Homo sapiens

<400> 5257

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ccatttacct gagttccagg ctccacatat aaaacacaga cataatatta ctaccccatg 180
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cctgaacagt ccggttggag actgctccag tccttggcac cgtcctgcat tctgtgggtc 480
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<210> 5258

<211> 788

<212> DNA

<213> Homo sapiens

<400> 5258

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agccacaagg ggtcttctctg tggccctcaa acaaaaaatc actgcattac atcagcagac 180
tgcattggag agaaaggcgc cgggacagaa aagcctgaga taaaccacct gtcattcttg 240
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 ctccaaaaca tctcctgtgt ctggtatctg gttatatgtt ggcctgacag agaagtttct 540  
 ttcggggcca gtgaatttaa aaaaaaaaaa aaaagaaaag cgggtcctac caactcatta 600  
 atactttaat actttaaat tccctcttta tagtaggttg aaatgcagta tctcttaaga 660  
 acaatggctg aaccaaagt ttcctcaaaa ctcacatttt tcccacat ttcanaaact 720  
 gcctcaggac taagctttga atttttttt tttttttaat ctgggcaaaa ntctatcta 780  
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<210> 5259

<211> 711

<212> DNA

<213> Homo sapiens

<400> 5259

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 gtctgaaacc aggggtagag ttacaggag gccgggctgc tcaggagagc tagaatgaag 420  
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 gggactaaga ggctctagga ggctccagcc tcattctgcct cctatcccct gccttgttca 600  
 naggcccaga gctggggccc ggaagtgatc atgaagatgg aaactgtggt ctggctcatg 660  
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<210> 5260

<211> 823

<212> DNA

<213> Homo sapiens

<400> 5260

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cctcccagcc tctggtgacc atcatatggt tctctactcc gttagatcaa cttttttttt 120
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caaaaataac accacacatc tccaaccatc ttatctttga caaacctgac aaaaacaagc 660
aatgggggaa aggattccct atttaataaa tggtttggga aaactggcta gccatatgca 720
gaatactgaa actggcccct tccttacacc ttataccaaa actaactcan gnggataaag 780
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<210> 5261

<211> 816

<212> DNA

<213> Homo sapiens

<400> 5261

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gggagtccaa agaccaaag tatcaagtaa ttctgaaatt cttgggtcc gccatctaa 180
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tgtttccagt agtttctggga ttattgcagc ccaaccacca aatattctaa ataactctgg 240  
aatattggga atacagccac ccagtgtgtc aaatagttct ggacttttgg gagtgtctacc 300  
cccaaata cctaacaatt ctggacttgt aggagtacag ccaccaaag ttccaaatac 360  
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tgttactaac ccagaaaaaa ggataccact tgggaatgat acattcaaca ggaaggagat 720  
agagattacc ggtttcctcc tatagaaacc agggaaagca ttantagacc ttcccctgng 780  
gatgttaaaa atgtggttgg ccgncatag atccaa 816

<210> 5262

<211> 777

<212> DNA

<213> Homo sapiens

<400> 5262

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tgcacaaaga aagcaagggc ggaccatggt ttgattccag attgaagtta gaaaaaacag 720  
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<210> 5263

<211> 732

<212> DNA

<213> Homo sapiens

<400> 5263

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gcccaccctt gccaaaagcc ctgaccccag ggaaggaggc tgctcaccca gccttggccc 180  
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<210> 5264

<211> 765

<212> DNA

<213> Homo sapiens

<400> 5264

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<210> 5265

<211> 854

<212> DNA

<213> Homo sapiens

<400> 5265

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<210> 5266

<211> 685

<212> DNA

<213> Homo sapiens

<400> 5266

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 cttacctaaa tttgttcctt tgtaaaatga aaataatagt agcatctacc tcgtagggct 180  
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<210> 5267

<211> 843

<212> DNA

<213> Homo sapiens

<400> 5267

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<210> 5268

<211> 739

<212> DNA

<213> Homo sapiens

<400> 5268

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atttacatga ctttttgagg gtttgaaccc aactctttgg tctcaaaaac atctcattcc 180  
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<210> 5269

<211> 625

<212> DNA

<213> Homo sapiens

<400> 5269

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 gcgatcaagc caggctttga aaggtagaga ggatttggac aggatttggg aatagcactg 480  
 ggtttggtag ccacagaatt cagcttgatt gagttcactt tttcctgaaa ccaaaggaca 540  
 gttctctgag ccaccttaaa cctggtttcc actaagactc ttgttcaca ttcaggaccc 600  
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<210> 5270

<211> 774

<212> DNA

<213> Homo sapiens

<400> 5270

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gtttgggaat ttcattggga ttttcaaaac ttcaggggta gtagaaagag gggaagggtta 180  
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aatccagcca gtggccctca ttggccatgt gacctggcaa gtaacatgtg ctgagctgag 660  
cttcacgggtg agcataggaa cccctctga gggctcagtg cacttggcaa cattggaaga 720  
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<210> 5271

<211> 804

<212> DNA

<213> Homo sapiens

<400> 5271

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agaaaactgaa aagaaggagc gatatatagt tatcagcaaa gtagatgaag aagaacgcaa 180  
aagaagagag cagcagaaac atgccaaaga acaggaggag ctgaatgatg ctgtgggatt 240

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 cagatcaaaa ctcatgaac ctttttttaa caagttatct cttatgaggg tcatggatat 720  
 cccctatcta aacttggaag ggccagactt gcagcctaaa cgtgacatgn tctcatgtga 780  
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<210> 5272

<211> 846

<212> DNA

<213> Homo sapiens

<400> 5272

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 cactgaagag cgccagtcga cgtgggtgcg acaactcgcg gagtcttagg agcaaaacgt 180  
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 cccggcctcc gtaatgagag cccggaacca ctctttgtgc cgcagcttcg cagtgaacg 360  
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 gaaactgatc tcaattccca ggacagaaaag gacctggaca agtttattaa attttttgcc 480  
 ctcaagactg tccaagtgat tgtccaggct cggcttggtg aaaagatttg cactcgttca 540  
 tcatcttctc caacgggttc agattggttc aacttagcaa tcaaagacat cccagagggt 600  
 acacatgaag caaagaaggc actggcagga cagctgcctg cagtcgggag gtccatgtgt 660  
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tgaaatgaat gaaaagtgtg ataaagaaat caaaggttnc tacacggggg tacaacagaa 780  
ctggcattgg ttgcttgaag tcccttcttg ctataactan ggtgacaccc agcctatagg 840  
ctnttc 846

<210> 5273

<211> 810

<212> DNA

<213> Homo sapiens

<400> 5273

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aattaagaaa tagaacttgg gtcaaaattc tgttacaaag cttcataatt tgtcccgaag 180  
catatgggtg agcattctga gaaatttgct ttttgttgtt ttgacattcc taatttggga 240  
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gttcatgtaa acatggacat catgatggct atttaaaaaa tatttgttct acaccttctc 360  
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<210> 5274

<211> 782

<212> DNA

<213> Homo sapiens

<400> 5274

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ttctcagtaa ctattttcag acttaatttg cctgaattac atttcatgtc aaaagcatgc  180
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ggtgtatttg attattaaag tgttacaagt tattgggttg caaaattaag cttttagagt  660
tatcagtttt gtgggtaagt tttncatagt attatgtana gcctgaagat ggtactctct  720
atcaaccact cttctatagt gggatttcat ttctaattgt agctcttgga naggcaggtct  780
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<210> 5275

<211> 666

<212> DNA

<213> Homo sapiens

<400> 5275

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atatcaaaa catagtctac ttaccatcc aacgatgtat ttgatata gccaagtatt  180
tctctctaca actgtgagca atgctaacc actccagcct tcttacctg taatgatacc  240
ttttctttgt cctctctgga agtttctagt agcatatctc caaataatta ttgaatttga  300
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aaaaataaaa aataacataa aaccaagtaa ggtagacaa aacagttgaa agtttaaaat 420  
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<210> 5276

<211> 840

<212> DNA

<213> Homo sapiens

<400> 5276

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 ctcagtttac agaccactga ccagaggcca ctccagggtg tcaggactaa gagaagtcac 180  
 aaaacagcag atttcccaag agcagcggaa aatgaccag tcacagatat catttgagga 240  
 tgtggctgtg gatttcacgc tggaggaatg gcagctactt aatcctactc agaagaactt 300  
 gtacagagat gtgatgttgg agaactatag caatctgggtt ttcttggaag tctggctaga 360  
 taatcccaaa atgtggctcc gagataatca agacaacctt aaaagtatgg agagaggcca 420  
 taaatatgat gtttttggaa aaatatataa ttcaagcata aacattgttc atgtaggact 480  
 gcgatcccat aaatgtggca caggagaaaa aagtttgaaa tgccttttg atttgcttat 540  
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 atccagcaac gaagagccat ggctcactgc taatcacata acacacacag gagtctat 720  
 atgcatggaa tgtggcagat ttttttaac aagaagtcac aacttggtat tcaccagaga 780  
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<210> 5277

<211> 797

<212> DNA

<213> Homo sapiens

<400> 5277

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gaggaggagg tatggggatg actcccaagg aagggtttg cctaccttga tgggtttgct 180
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<210> 5278

<211> 820

<212> DNA

<213> Homo sapiens

<400> 5278

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atatatggtg acccagtac cttcctgccc cactgcccc ggaaaagtgt ggtccattgc 180

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tctaagattt ggagctgcag gaaaagaatt acagttgagt acctccagca cattgtggaa 240  
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 ctgaggctgg taaagttcct gcctgagatt ttggccttgc aaagggatct agtgaagcag 360  
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<210> 5279

<211> 828

<212> DNA

<213> Homo sapiens

<400> 5279

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 gacaattagc acagcctgct gcctgtagct gagctgtgca gagccaggga acaggagtgc 180  
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 gagatgagat tttggtgcaa gtgatttatt aaggaaggga tcccaggaaa ggcagtaagg 660



gagtagggga aacaagttag ggatggggaa gaatccaagc aaaggttcaa cttcaaaagt 720  
tctggcctca gtctaattccc gagtgtaaatt taggcctcan agttgggtcta ccttcaggca 780  
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<210> 5280

<211> 844

<212> DNA

<213> Homo sapiens

<400> 5280

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<210> 5281

<211> 665

<212> DNA

<213> Homo sapiens

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<210> 5282

<211> 809

<212> DNA

<213> Homo sapiens

<400> 5282

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<210> 5283

<211> 761

<212> DNA

<213> Homo sapiens

<400> 5283

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 gctgccctgg accctgctga ctggccagat ggttcttacc caacgtttga tggctcatca 180  
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 aagccacggg agaacctgca gttttggang atttgcttgc gaatcgctct ntgcacgttg 720  
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<210> 5284

<211> 691

<212> DNA

<213> Homo sapiens

<400> 5284

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<210> 5285

<211> 721

<212> DNA

<213> Homo sapiens

<400> 5285

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aagagaaatg ctcttcatac ccagtaggca gacagtcctt acatataaaa agcttcctga 60
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atggtttgga gatgacggca ggatcctagc tctgccaaac cccatcaagc catttccttc 240
aaggccgcca gtactaacac aggagcagag cattaaggca gagcttgaaa cactgtataa 300

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aaaggctgta aaatacgttc acagtagtca gcatgtgatc agatctggag accctcctgg 360  
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<210> 5286

<211> 780

<212> DNA

<213> Homo sapiens

<400> 5286

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 cccaccggcc tccagcctcc aggctgcaag gaccacggct gtcctcggg aagccctttc 360  
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 atgaaaggga agagaacttg aagagctgaa ggataatatt gaattcagan gncataagcc 720  
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<210> 5287

<211> 698

<212> DNA

<213> Homo sapiens

<400> 5287

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aataatgcaa aagagatttg ttgtaaaagc ttigaaattt aattatgac agggagttct  180
aaaggaaatt aaacatagca tgagtacttt taaaaaatat gaatttaata tagcatctta  240
tcaaataatt catccacac ggctagctca cttccacca ggaaatagaa aagaattttt  300
gaggactctt aactaataat aatttctgaa tttctctgac accttactg tttctaaaca  360
ttttttttgg tcatgttaac ttacttgatt cttcagagtt tgcttattat agccatcact  420
ttctaatagt acatagtttg aaaagcactt ggccgtcttc tgcattctgg gaacatgtgg  480
cttcctgacc cacagaggat ggcttctcgc tgtgtcctca tgtggtggaa ggggtgaggg  540
gtctctctga agtgtctctg ctaagggcgc tagtcccatt cttgngggct ttattctcac  600
cacctaatac ctcccaaagt ccaccttcta acaccatgc ttcangggaa aaatttcaaa  660
gtattgnatt tgggggaggg ggccggcatt naatagtc                               698
    
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<210> 5288

<211> 629

<212> DNA

<213> Homo sapiens

<400> 5288

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tggccgtgct taagggtctt cggaacgggg ctgtctatgg agccaaaatc cgggcccctc  180
acgcgctggt catgaccttt ctcttccgga atggcagcct ccaggagaag ctgtgggcca  240
    
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cggccttcct cgggggtatc ctgggtgttg gagaaaacaa taacatcaac agccagatca 420  
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acatccctga acccaggtgg gacccgttcc cgctgctcac tgcggtggtg tgggggctgg 540  
tgctgnggt ctttgagtat caccgatcca ccctgcagnc ctgctgcag ncctccatga 600  
cctacctcta tgaggacagc aatgtatgg 629

<210> 5289

<211> 817

<212> DNA

<213> Homo sapiens

<400> 5289

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tcccaaggct gctgatagtc ctttttcac agataaacat gcccaactca tcttgccca 180  
aatcaataag atgagaaatg gacagcattt ctgtgatgtg cagctgcaag ttggacagga 240  
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aatctttcag atacttctag atttcattta cacaggtata gtgaacatag gtgtgaataa 420  
tgtccaggag ttgattattg cagcagacat gctacagttg actgaagttg ttcattcttg 480  
ctgtgaattt ctgaaaggac aaattgatcc actgaactgc attggaattt ttcagttctc 540  
tgagcaaatt gcctgccatg atctcttgga attctcagaa aactacattc atgtccattt 600  
cttgagggtt catagtggag aagagttcct ggcacttacg aaagatcagc tgatcaaaat 660  
tttgcaagt gaagagctta ncattgagga tgaatccagg tcttcttanc tgcaatgcaa 720  
tgatctgaa agatttggga aaaagaagaa acatgtggtg gnaatgctag acccaattcg 780  
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<210> 5290

<211> 815

<212> DNA

<213> Homo sapiens

<400> 5290

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aatatgtgga gaaactagag gcccttttcc cagacctacc caagagaaat gatatatattg	180
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aagaccagaa gactatctat agacaaggcg tcaaggtggc cattagtgc atatatatgg	300
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cctcaagtac ccaccctaac ctccatgcct atcttcaagg caacaccag gtctctcgaa	420
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ctgctgagcc gcttcgagaa gtgcagtcag atcttactgt cacagtctac cacagccttc	720
cttgtcccag aagtgactgn tgaaaagcca agaggtaatg ggtgaagcta cctgactcac	780
tttaa atgcc tggttttgag angnttggag aatca	815

<210> 5291

<211> 676

<212> DNA

<213> Homo sapiens

<400> 5291

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 tattataatt tctctgagcc tgaaaattga aataataact tcatctttaa gggatgcaat 300  
 gagaaacaac tatgttccaa tatgaaacta cattacttgc agtgatcaat ctgagagatt 360  
 gtgctttgat aacctgactt caaaatacag accaagatac tttcctaatt tatcatttga 420  
 ggttttaaat aattatgata tacaaggggt aattttgntt tttgtttttt tttttgcttt 480  
 tgttagagaa ttttaagcaa tttacttggt tagctcaatg ctatataaat atgtttgcaa 540  
 ttattttaat ttaaaaactt aaaaaataca aatgtaaatt atgatcagat acctttgatc 600  
 ataacaccta aaagaaaang gaggaacac tatcaaaatt tgattttctt atgnttcatt 660  
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<210> 5292

<211> 671

<212> DNA

<213> Homo sapiens

<400> 5292

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 cccctgcaca cccctagtgc cgcagtaagc acgcccacca ttaaagcaga ccaggagtta 360  
 ctaacctgcc tgccttcctc agaggctcag tgttgagttg gaagagaggg gttttacagt 420  
 gggccagtcc ttaagggtgt gtgggtgctg ggctgtggtt gtggccttag gtctgctggc 480  
 ggggtgtgctg cacctccttg gcctccctc tccctgggctc aaggaagtaa acaagtcctc 540  
 tgtatgatgg ggaggccagg acctctcgtc cttttaaggc agcttggtgc ctgccagtca 600  
 cctcaacggg cggcaagtca ntgggcttgt gngcatctgt aaactcagca ctttgggagg 660  
 ctgaagcang a 671

<210> 5293

<211> 710

<212> DNA

<213> Homo sapiens

<400> 5293

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ctgcagtccc tgcctcctga gttcaagcaa ttcttgtgcc tcagcctccc tagtagctga  180
gattacaggc gtgtggcacc acgccagct aatttttcta tttctagtag atatgggggtt  240
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gaagctggcc atgttcgtca tcttggtttc atactgacaa gcaggagtca gtgtgccccca  480
tggcgtgggg gccctggaag gaagcctctg cagctgcaga aagacagacc ccacttgga  540
aataaaacag cagcataagg acttgggctc taattacaga gttgtcaggt tgaagagaag  600
tggttgtggg ataacaggaa gagaaaatat tttgntctt ctcancataa tgaattttca  660
tcagtacgcc tatttccttg gttaactttt tgccaaatgg ggaccttng 710

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<210> 5294

<211> 691

<212> DNA

<213> Homo sapiens

<400> 5294

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atcgcttgaa cccaggaggc ggagggtgca gtgagccaag atcacgccac tgcactccag   60
cctggccgac agagtgagaa cccgtctcaa aaataaatta aaaaataata aaaaataaaa  120
caaagtaggc catagatcta aatgttagag ctgaaactac aaaacacttg aagtaaatac  180

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aggagtaaatt cttcatgacc tgagttaagc aaagccttct tagatgcaag accaaaaagca 240  
 caagtagcaa aagaaaaaag tagacaaact ggacttcacg ggagattaag atttgtgctt 300  
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 ggactcgcca cctcctgccg tgctgggtggg ggaagcgcca ggctgtaggt ggggtctggc 420  
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 gtttctgggg ctatggagtt gaggggtggag ccagcagcaa ggggacaggg ctgctggtgg 540  
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 tgcctctcag agttgcagcc cttgggtgat gttgcagctc acatttcccc atttctgatt 660  
 actgcttgcc ccacttncin ctgngtcctt g 691

<210> 5295

<211> 835

<212> DNA

<213> Homo sapiens

<400> 5295

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 ggatttgcat gaactccact ctgagctgaa atacagactg cgggtgttaat atccttttct 180  
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 aaagtgcana gaaggacagc tcaagcttct cccaacacag agctagattt tggangaact 720  
 gctggatctg atgtagacca agaggaaatt gtggatgaaa gagcantgca ggatgtggaa 780

tcactgncaa atctgatcca ggaaatcttg gactttgatc aagctcaaca nataa 835

<210> 5296

<211> 729

<212> DNA

<213> Homo sapiens

<400> 5296

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 gggaagcagt gcaatggctt caaaaatctt gcttaacgta caagaggagg tgacctgtcc 180  
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 agcctgcac actgtgagca acaaggaggc agtgaccagc atgggaggaa aaagcagctg 300  
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 catagtggag agactcaagg aggtcaagtt gagcccagac aatgggaaga agagagatct 420  
 ctgtgatcat catggagaga aactcctact cttctgtaag gaggatagga aagtcatttg 480  
 ctggctttgt gagcggcttc aggagcaccg tggtcaccac acagtcctca cggaggaagt 540  
 attcaaggaa tgtcaggaga aactccaggc agtcctcaag aggctgaaga aggaagagga 600  
 ggaagctgag aagctggaag ctgacatcag agaagagaaa acttcctgga agtatcaggt 660  
 acaaactgag agaccaagga tccaaacaga atttgatcag cttanaagca tncataataa 720  
 tgaggagcn 729

<210> 5297

<211> 828

<212> DNA

<213> Homo sapiens

<400> 5297

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aatcactgga ggccatgtct acactgccaa gagaaaaaag ttcaaaaact catttcaaac 180  
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acaaaatttt aaaatctgac cccagccctt gtgattgttc agtatataat caatgggtatc 420  
ttacaaggac tattttatatt ggaatcaatc aaatttgctt cctgccaaaca ataagttaga 480  
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cagtagtgcc gcctcgctgg cattgggttg ctgcagttgn gctgagacta accgagtgct 780  
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<210> 5298

<211> 832

<212> DNA

<213> Homo sapiens

<400> 5298

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gactatcttt ggcagaagaa ccttcgccag tcatctataa gacatcattc acagtgcac 780  
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<210> 5299

<211> 721

<212> DNA

<213> Homo sapiens

<400> 5299

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atcatcacc acaggccgca cgacctcagg gtccaccggg tgctgtgcag tctatggttg 180  
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<210> 5300

<211> 787

<212> DNA

<213> Homo sapiens

<400> 5300

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 caagaccaga ggcagggagc ctggcgtccg agaacctgga gaccagctc cccaggcag 420  
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<210> 5301

<211> 824

<212> DNA

<213> Homo sapiens

<400> 5301

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 cagccccctt tgtccaaatt ggcangtttt tctctcgtc aggcctcatc gacaaagtcg 720  
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<210> 5302

<211> 806

<212> DNA

<213> Homo sapiens

<400> 5302

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 tgcagacatt gaaatctgat gggaggatgc cttctagctc cagagctgaa tccccaggac 720  
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806

<210> 5303

<211> 730

<212> DNA

<213> Homo sapiens

<400> 5303

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<210> 5304

<211> 654

<212> DNA

<213> Homo sapiens

<400> 5304

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<210> 5305

<211> 790

<212> DNA

<213> Homo sapiens

<400> 5305

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<210> 5306

<211> 820

<212> DNA

<213> Homo sapiens

<400> 5306

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cagatgtgca ccaccacacc cggctaattt ttgtatTTTT agtagagacg gggtttcacc 180  
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<210> 5307

<211> 674

<212> DNA

<213> Homo sapiens

<400> 5307

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taaaggggtg ctagcatagg acttaggaag acttttttcc aaatcattgc tttgatttta 180  
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<210> 5308

<211> 774

<212> DNA

<213> Homo sapiens

<400> 5308

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<210> 5309

<211> 832

<212> DNA

<213> Homo sapiens

<400> 5309

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<210> 5310

<211> 834

<212> DNA

<213> Homo sapiens

<400> 5310

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tgccaagcac ttacattgaa gggttgcccc aaggcctaca acggcagaag agactgttca  780
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<210> 5311

<211> 767

<212> DNA

<213> Homo sapiens

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<211> 469

<212> DNA

<213> Homo sapiens

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<210> 5313

<211> 724

<212> DNA

<213> Homo sapiens

<400> 5313

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gcggaggact tggaggacac gcagttcccc agtgaggaag ctagagaagg tggagggggt  180
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<210> 5314

<211> 729

<212> DNA

<213> Homo sapiens

<400> 5314

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<211> 739

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<211> 718

<212> DNA

<213> Homo sapiens

<400> 5316

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<210> 5317

<211> 850

<212> DNA

<213> Homo sapiens

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<210> 5318

<211> 665

<212> DNA

<213> Homo sapiens

<400> 5318

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tgggctggaa aacccccctt ttcctaagga aagatttaac gatctgattt cttggatcag 600  
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gncgg 665

<210> 5319

<211> 626

<212> DNA

<213> Homo sapiens

<400> 5319

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canggccacc tgcaggacgc cgacacctac cctcagcag acgccggana gaaatgagta 180
ncaacaaaga gcagcgggtca gcagtgttcg tgatcctctt tgccctcatc accatnctca 240
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aaaccnggnt catcttctgg ggcccc 626
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<210> 5320

<211> 823

<212> DNA

<213> Homo sapiens

<400> 5320

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cccagatcc agatgttccc acaggcccag gagagcccgg ccgccgtgga ggtgctcacc 180
caggtggtcc atccctcagc agccatggcc tctcaggagc gggcacaggt ggccttcaag 240
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gtcaaggacg gtgtcaccca ggtggtggtg agcgaagagg gtgccgtcca catggtcgcc 360
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<210> 5321

<211> 857

<212> DNA

<213> Homo sapiens

<400> 5321

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 ccggaatctc ccgggcctct gctctgatta ctgctctgcc ttccattcta actgtcactc 180  
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 atctttggag attgaagaac cagcctcaaa ccataatggc ggacaacttc tttttggnc 780  
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857

<210> 5322

<211> 781

<212> DNA

<213> Homo sapiens

<400> 5322

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 ggctctcgcc agaccctcag cacgcagagc tggcttctga tagaagtgct cgggaaagaa 180  
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 atctaactca ctagacccca agcaaacc aa ccagcccgat gccacggcga agccagcctc 540  
 ttccaagtct gtcgcaaatg gactctctgc cttagactcg aagcttcagc acagctctgc 600  
 cagggaagac atcaaggaaa acctggagct gcaagcccgg ggaaccacaca ggtgcctggg 660  
 acagaagcca gcccttcaca gggcataccc tgcaagagcc cagcttcagg aagccggcct 720  
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<210> 5323

<211> 854

<212> DNA

<213> Homo sapiens

<400> 5323

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 gcccctctgc ctgcgggaaa agcctgatga agtcctccga tattgatcag gattttattca 180  
 cagacagtta ctgcaagggtg tgcagtgcac agctgatctc cgaatcgag cgtgtggccc 240  
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 cccattatca aggcaaaatc cacgccaaaga gggttaaaact cttgctagga gagaagaccc 480  
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 cggtggtcgc atctccctat caaagaagag attcagacag atactgtggg ctctgtgcag 600  
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 naggtctgaa gcgcaattac agatgtacca tctgcagtgt cttcctaaac tcaatagaca 780  
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<210> 5324

<211> 771

<212> DNA

<213> Homo sapiens

<400> 5324

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 tctccattgt gccccaggca aacttagcca ctgtgtcctc tgtgctcact ctctctctct 180  
 tacacacttc attgccctcc ttctttcagt cttttttcct cagtatatct ccagtgttga 240  
 acacagggcc tggtagaccg tagacacttg gtacatcttt gtaaaagaat aaatgatgaa 300  
 tgaatgatat tgaggctctaa aagctcagga tgagaaagag aggcaaattc agttgcaagt 360  
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gtttgtctgg gacaggcctc ctgtgaagac tcacatctat gatccagcag taacagcttt 480  
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 gagtggactg gtgtctgagg tgagtatagc ccacttggat acagatgccc agtatttgg 600  
 tacctgccct ggggagagga ctggnntctc cctgggtgtat agactcatag gctggctaca 660  
 gacatatata cacacacacc caactactga ttgccttgg gactacactg ngcttactta 720  
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<210> 5325

<211> 773

<212> DNA

<213> Homo sapiens

<400> 5325

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 cccaccccaa gaattttgaa agcttttagc aaatactaata gtatttgctt ccccttcata 180  
 agttaaagg ataaatattg atactttcat attacattat gagggcagct gcagcctgtg 240  
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 tccacagagc cagttggagc caggaacagg caggagccca gcccttttca gagttggagg 360  
 ggtgggggccc tccccctcct ggggtgcaact gtgcagccac ccagcagtga cctgggtttc 420  
 cctgtgcttt caggggctgg gaagtgtccc tctccagccc tggccccac aggctcagaa 480  
 gtgcctgccc ccactgtctg gcctctccct gtccccggtg tccactctga ttttagagca 540  
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 acaggccagc cctctgcccc ctcagcacc cctctggact ttgggtgccc gtgagcatgg 660  
 gagggaggct gaaggggcac tgaggcagct cgatgtgggc ctgcangctc tgtggacgac 720  
 atgatcaatg gtggcaggaa gcagacaggc ttctgggcag aaanggtan ggt 773

<210> 5326

<211> 695



<212> DNA

<213> Homo sapiens

<400> 5326

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aacctccacc tcccaggttc gagcaattct cctgcatcag tctcctgagt agctggcggt  180
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catgttggcc aggctgggtc cgatctcctg actcaggtga tctgcccgcc ttcgactcac  300
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catgagatag acatatggtt ttgcaaaagt ttctacataa atcagaatgg ttcccagaac  420
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taacagtcac acccatatit gcattatata tgtttcatat gttccgtgta actgcctcct  540
ttcaaagtgt tgggtatatt ttcaagtcaa ctgnaaccaa aagtatagag aaactgaatg  600
caagccagct ttctgcatat gtaacagtgt aagaatccag gttgtataga tgggttnttg  660
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<210> 5327

<211> 745

<212> DNA

<213> Homo sapiens

<400> 5327

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ctccagtccc cttcagagge gactgcaact cgcccggccg tgcctggact ccctacagtg  180
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 tcaaacttaa actatttcca gaagcttcaa aagggtcaatg caaccaactt ccaggccctg 540  
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 ttttacaggg ctggggaccc cattcttact tacttcccca agtgggtctgt aataagcttg 660  
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<210> 5328

<211> 712

<212> DNA

<213> Homo sapiens

<400> 5328

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 aggatgcagt gactccaagt ctgaggggtg ctccccagga agagccaccc cccacagcca 120  
 ttgacagagc attggagtaa gttttacctt catcccttag atgtgaattt gttatcctca 180  
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 tcagcatcta aaactagcgt tgtttgagga tgttggagcc aacgggtctt tgccagatag 360  
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 agaagccaga cctcttagat ccagaagggc caatggagct gggctggcct gctgccactc 660  
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<210> 5329

<211> 570

<212> DNA

<213> Homo sapiens

<400> 5329

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ggactcctgg gtctgaggga ggaggggtgg ggcccgtact cctggatgta agggaggagg 180
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<210> 5330

<211> 746

<212> DNA

<213> Homo sapiens

<400> 5330

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gagtgtgggg atgaagtcct gtactgctat gaagtgcagt tggaaagcaa ggtgcggcgg 540  
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 aagaaggtta tgtaaacagt atttaaacac aatcatgggtg cctaccagtt cttcagagaa 660  
 gcgttgcaat ttgaaattga tgactctttc cccaacatgt ccggttgctt gtggggaaga 720  
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<210> 5331

<211> 710

<212> DNA

<213> Homo sapiens

<400> 5331

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 tagcaggaac tgcaggtgtg agtcatcaca ctacagctaat tttttttttt tttttttttac 180  
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 agaaccgtga gccaataaac ctctgttcct tgtaaatgag tcagcctcag gtattctctt 660  
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<210> 5332

<211> 644

<212> DNA

<213> Homo sapiens

<400> 5332

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tgcacgccat tgcctccag cctgggcaac aagagcgaaa gccagtctca aaaaacaaag 180  
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cgggacgttg ccctcgttct agcaccagag caggcagggg caccgctgct gganagcgcc 600  
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<210> 5333

<211> 431

<212> DNA

<213> Homo sapiens

<400> 5333

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gttcgagacc agcctggcca atatggtgaa acccgcctc tactaaaaaa atacaaaaga 240  
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aatcgctcga acccaggagg cggaggttgc agtgagccga ggttgtgcca ctgcactcca 360  
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<210> 5334

<211> 840

<212> DNA

<213> Homo sapiens

<400> 5334

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gctgggtacc aaagatgaag atccccacac cagtgatctt gntggaagcc tgatgactga 780
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<210> 5335

<211> 794

<212> DNA

<213> Homo sapiens

<400> 5335

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<210> 5336

<211> 708

<212> DNA

<213> Homo sapiens

<400> 5336

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aaggcatccc ggtggagatg gtggtgattg gggacgacaa gcgccttcac tgtcctgaag 660  
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<210> 5337

<211> 728

<212> DNA

<213> Homo sapiens

<400> 5337

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gtggacagca atcttctcta ccagttcaga atgaacttcc ggcggangcg aagactgatg 660  
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<210> 5338

<211> 872

<212> DNA

<213> Homo sapiens

<400> 5338



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gaaaaacaca agtatagggt ctgtgttcag tacttagcat ccaaagcca gcttctaatac 180  
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<210> 5339

<211> 837

<212> DNA

<213> Homo sapiens

<400> 5339

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gaacttggca gtttttcagt cgtatacagc caaagaaaag tattcagtgc cgcttttggg 180  
gttgtttatg cattcctcac ctaaccagtt gctttgcttt taaaaattgc caatttggaa 240  
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 taanggattt gtgtgaaaac tnggttttga gcatctcttt tctggtgctg gtgacancag 780  
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<210> 5340

<211> 761

<212> DNA

<213> Homo sapiens

<400> 5340

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<210> 5341

<211> 758

<212> DNA

<213> Homo sapiens

<400> 5341

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cccacggtgg gcaccaatct tactgacatc gtggcacaga gaaagatcac catccgggag   180
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cgattncctc tgcttctgct tggccccaaa ctttggttaa agctactttg gccgggcnca   720
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<210> 5342

<211> 886

<212> DNA

<213> Homo sapiens

<400> 5342

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agactcttca ggtctggcca ccctactata cggggagaca ttgacacagc agttccaaag   180
agagcagcca gggaggtaaa aaggccaatc cccacttttt ttttttttt tttagagaag   240

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accaagacaa agaaaaagga taattgattt ggaaaagact tgaagaggga tcggtgtctt 300  
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 ttttcttttt ttgatctca ctctggcatt caggncctga atgcatggca caatcacggg 840  
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<210> 5343

<211> 801

<212> DNA

<213> Homo sapiens

<400> 5343

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ccaaatcgaa gatataccaa gcattttact tcagangtct tctncctctg gaaacagcag 720  
gatacttagg gatctcttta aaagtgatcc aggaagatgg attatctgtg gacaaaagaa 780  
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<210> 5344

<211> 724

<212> DNA

<213> Homo sapiens

<400> 5344

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gcctcccaaa gtgctgagat tacgggtgtg agccccgcg cctgactgag aattaacatt 660  
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<210> 5345

<211> 835

<212> DNA

<213> Homo sapiens

<400> 5345

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<210> 5346

<211> 813

<212> DNA

<213> Homo sapiens

<400> 5346

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<210> 5347

<211> 717

<212> DNA

<213> Homo sapiens

<400> 5347

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<210> 5348

<211> 767

<212> DNA

<213> Homo sapiens

<400> 5348

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<210> 5349

<211> 803

<212> DNA

<213> Homo sapiens

<400> 5349

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<210> 5350

<211> 736

<212> DNA

<213> Homo sapiens

<400> 5350

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 gtaatttgcg ttactttgaa ttttacttt ctttggctct catcattac tgcttttggg 660  
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<210> 5351

<211> 676

<212> DNA

<213> Homo sapiens

<400> 5351

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<210> 5352

<211> 850

<212> DNA

<213> Homo sapiens

<400> 5352

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attgcctgt cctggtcagg cccccacccc ccttcccacc tgaccagcca tgggggctgc 180

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<210> 5353

<211> 643

<212> DNA

<213> Homo sapiens

<400> 5353

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 tgtattttta gtagagatgg ggtttacca tgttggccag ggtagtctca aactcctgac 540  
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gcccagccag agtttcattg ngttttaatc aaagactggc ttg

643

<210> 5354

<211> 784

<212> DNA

<213> Homo sapiens

<400> 5354

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ctgaaccgaa ctcccagcac cgtgactctg aacaacaata gtgctccagc caacagagcc 180

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gcctcttctg agagcacagg ctttggagaa gaaagagaaa gcattctttg agaaaaacaa 420

gcaaaggaga agagtgttac tgtaccctta tgacagaatt gtcctggatt ttgactccat 480

ccacgccccat cacctttcta catTTTgctg acagataact aaccgatgat gaggccgagg 540

taaaagagac atctgcagtg tgacagaagg gagcatgaga agcatggctc accagccagc 600

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gcgcattacc ccataaaact ttttgagacg aggtgagatc tgagtataaa gataggtcag 720

aagtatttta aagggtttaa tgngcccaaa aggaaaaaaa gctngagacc ctttttgna 780

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<210> 5355

<211> 607

<212> DNA

<213> Homo sapiens

<400> 5355

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<210> 5356

<211> 753

<212> DNA

<213> Homo sapiens

<400> 5356

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 gagaattcat actggagaga agccttacca gtgtaataag tgtggcaaag cctttactgg 660

tcgntcaaac ctaacaatcc atcagggcat ncatactgga gaaaaacctt accaatgtaa 720  
tgaatgtgga aanggccttta gtcaaacttt aaa 753

<210> 5357

<211> 831

<212> DNA

<213> Homo sapiens

<400> 5357

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gcggagggttc agcaagaatg cctgcataaa ttttccaccc gggattatat catggaaccc 180  
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aaactggctg aagcccatcc agactgtttg atgctgaact tcaccgttaa gcttatttct 540  
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ttctcgagag tgctccggac ctctctagct acaatttttag atggaggaga agaaaacctt 660  
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gccagccatg atgtccgtgc tggccaggaa gagcaggggg cttcgttgtg cccagatcgc 780  
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<210> 5358

<211> 745

<212> DNA

<213> Homo sapiens

<400> 5358

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 atgaggcaga ttagtacaca tcgcacagca aatagcagga atatcagcat gaaagtgtctg 360  
 gtgcccctga cctcaagtct cgtgggggtga catgatgggc ccagatgatg tctatgcatg 420  
 aattgggttt gcctacagct gaggaaccaa ggaccaccaa ggacttagca ctttcctttc 480  
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<210> 5359

<211> 767

<212> DNA

<213> Homo sapiens

<400> 5359

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ccaaagcgct gggattacag gcatgagcca ccgctatgcc gtctttgntt taagatcttt 540  
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tggtgatttg taaaatgccc atccatgagt catggcccct gcactctggg aattttcang 660  
cttcttttaa atagattcta ccctactaga tatatccaca ttttactatc actttacacc 720  
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<210> 5360

<211> 705

<212> DNA

<213> Homo sapiens

<400> 5360

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aacctancca agtgcacgt gagtggtgct ggtggggcca ctcgggctgc cctgaccgtg 660  
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<210> 5361

<211> 762

<212> DNA

<213> Homo sapiens



<400> 5361

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tcagcaccat ggtgcgccag gtcccacgg ctccgcgcca gatccccccc actacaggga 180  
gcgagtcaag gccatgttct accacgccta cgacagctac ctggagaatg cctttccctt 240  
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cttcattggt gaatttgcca ccctgagcaa gctnactggt gaccgggtgn tcgaagatgt 720  
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<210> 5362

<211> 802

<212> DNA

<213> Homo sapiens

<400> 5362

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<210> 5363

<211> 712

<212> DNA

<213> Homo sapiens

<400> 5363

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<210> 5364

<211> 866

<212> DNA

<213> Homo sapiens

<400> 5364

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<210> 5365

<211> 763

<212> DNA

<213> Homo sapiens

<400> 5365

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 tattaagact aatgagaaac tgaaaacctt aaactaatga atattatttc tgctgctaaa 720  
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<210> 5366

<211> 807

<212> DNA

<213> Homo sapiens

<400> 5366

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<210> 5367

<211> 786

<212> DNA

<213> Homo sapiens

<400> 5367

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acagcccaag ctggctccct ttgtcatcca agctcatatt caagtcattg ctaaaatcac 180  
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atctcagtta gcactttcat ggtagttca antttgcttc gacaagaagg ccttatttaa 720  
cagtcctgac gtgccaagtc cttggttaatt taattnangg agtaaaagga tccttgaaaa 780  
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<210> 5368

<211> 767

<212> DNA

<213> Homo sapiens

<400> 5368

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ccagcttctg tggggagaga agttgaagga tcccgaagct ttagaaaaag gatctcagct	240
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gcttctggcc ttggcccttt tgagttggtt tccatttggg ctgcagggtga ctcagtgact	360
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gaccggccct tttagacactc accaaccaaa tctgttcatt cgatagagt accaggcctn	540
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gccaaactggt cctacatcct cagccccctt gccaccacct taaataggac ttactgatt	660
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<210> 5369

<211> 860

<212> DNA

<213> Homo sapiens

<400> 5369

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gctactttct aactgcacag tggtaaaaaa ggtactgagc atatcaaagt ctcagtattc	180
ccatttgtag gaaaggggag cagtgtgact cccttcctaa caggattctt gactggatga	240
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aatgtagctc tccataaatc atcaatcctc tcaacaatcg ttggagcttg gcattataat	360
ccccactgca cagatatgga aactgaggcc taagagggtg tcagttgtcc aaagtcacat	420
gattaggaag tggccaaagg gatttcctct gatcctcctt tctccagccc acggtcccat	480

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 gaagcctggg ttcagtgaag ccacaggagg ctgtccagga accagctgcc acttgacctg 660  
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 ctgatgtcag atgggcatca cgggtgcctgg catctggaag cagccggcca gcagtcatga 780  
 gacaactgct accagtgagg ganagcaggc ggttggaancc gaggaaaggc tcagattcca 840  
 ggggggntga gcccgccagt 860

<210> 5370

<211> 751

<212> DNA

<213> Homo sapiens

<400> 5370

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 ggcctctgtg ttctccaacc gcacatcccg gaagtcagcc ttacgtgcgg ggaacgacag 180  
 tgccatggca gacggcgagg gataccggaa cccacaggag gtgcagatga gccagctggt 240  
 gctgccctgc cacaccaacc aacgtggtga gctgagcgtc gggcagctgc tcaagtggat 300  
 tgacaccacg gcttgcctgt ccgcgagag gcacgctggc tgcccctgtg tcacagcttc 360  
 catggatgac atctattttg agcacaccat tagtgttgga caagtggatga atatcaaggc 420  
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 gcacagtgtg gcggctgaac gccggcgcat gcgccttgtc tatgcagaca ccatcaagga 660  
 ccttctggcc aactgcgcca ttcaaggcga tctggaaaag canagactgt aaccgcatgg 720  
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<210> 5371

<211> 680

<212> DNA

<213> Homo sapiens

<400> 5371

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ccctcctggt tctcagatcc ttcgaaatgt gcagatttgc agccctgcat cctgcttgtc  180
actcagcgtg gcccagttt tgtttcagaa aataggagcc ctattaggtc atccccagct  240
tgtaagtct cattattgtg tgttttcccc tgggttggtg gaatttgaca cagttttacc  300
tgatgtgatg cttgaaggcg accctatgac tctttttaaa ggaagagttt gcaggacggt  360
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cctgagctgg gtgtggtggc tcacatctgt aatcccagcg tcatgggagg ctgaggcaag  600
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<210> 5372

<211> 762

<212> DNA

<213> Homo sapiens

<400> 5372

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catatgtagt atgactgtca gagacgttgg aacctgaagc gacccattt tgagtgaggg  180
ctagaaaaat gaggccggga cttacgggcc tgcattctca gaaggatatt cctagctttc  240
agatgcttac ggttaaggga acaaattaat gtttactgaa gagacccgag cgtccagata  300

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gctggatatac tggagaacaa aggcgttcct aattttgctt taaaggtagt aatagggatt 360  
 cttgcaaaat gtaataatta aagttaattc tttatcacia accctttagtag cagagcacct 420  
 ctccccatgt atacaagcat tgtacctagg gtggatacgt tccttctctt agtttcggga 480  
 acgcccttct ctgtctatgg agtagctggt ctttcaccac tttactttct tgataaactt 540  
 gctttttattt tgcaccgcgg actcgccctg agttattttct tgcgcgagac ccaagaaccc 600  
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 gactatagtg ctttggggaa gtggtggggc ctataacata tttctgggcg aacgacggaa 720  
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<210> 5373

<211> 679

<212> DNA

<213> Homo sapiens

<400> 5373

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 gtcaactttc tcaatgtagc ccggacctac atccccaaaca ccaaggtgga atgtcactac 180  
 acccttcccc caggcaccat gccagtgcc agtgactgga ttggcatctt caaggtggag 240  
 gctgcctgtg ttcgggatta ccacacattt gtgtggtctt ccgtgcctga aagtacaact 300  
 gatggttccc ccattcacac cagtgtccag ttccaagcca gctacctgcc caaaccagga 360  
 gctcagctct accagttccg atatgtgaac cgccagggcc aggtgtgtgg gcagagcccc 420  
 cctttccagt tccgagagcc aaggcccatg gatgaactgg tgacctgga ggaggctgat 480  
 gggggctctg acatcctgct ggttgtcccc aaggcaactg tgttacagaa ccagctcgat 540  
 gagagccagc aagaacggaa tgacctgatg cagctgaagc tacagctgga gggacaggtg 600  
 acagagctga ngagccgant gcaggagctc gagagggctc tggcaactgc angcaggagc 660  
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<210> 5374

<211> 738

<212> DNA

<213> Homo sapiens

<400> 5374

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tggaaagcca tggagagcgc tctccccgcc gccggcttcc tgtactgggt cggcgcgggc   180
accgtggcct acctagccct gcgtatttcg tactcgctct tcacggccct ccgggtcttg   240
ggagtgggga atgaggcggg ggtcggcccg gggctcggag aatgggcagt tgtcacaggt   300
agtactgatg gaattggaaa atcatatgca gaagagttag caaagcatgg aatgaaggtt   360
gtccttatca gcagatcaaa ggataaactt gaccaggttt ccgtgaaata aaagaaaaat   420
tcaaagtgga gacaagaacc attgctgttg actttgcatc agaagatatt tatgataaaa   480
ttaaacagg cttggcttgt cttgaaatcg gcactcttagt gaacaacgtg ggaatgtcgt   540
atgagtatcc tgaatacttt ttggatgttc ctgacttgga caatgtgatc aagaaaatga   600
taaataattaa tattctttct gnttgtaaga tgacacaatt ggtactgcct ggcatggtgg   660
aaagatccaa aggggctatt ctgaacattt catntgcaat ggcatgctcc tgtcccactc   720
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<210> 5375

<211> 706

<212> DNA

<213> Homo sapiens

<400> 5375

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tgaaactctg tctctactaa aaatacaata attagctggg tgtggtggca cgcacctgta   180
atcccagcta ctggggaggc tgaggcagga gaatctcatg aaccaggag gcagagggtg   240

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cggtgagctg agattgcacc actacactcc agactgggat ttaagaaaat gtgtagtta 300  
 atattgccta aaatgctcga atgtaggtta taaacaatga gaatagggcc catgaagaga 360  
 ttttcgtttt tcacagaggt gagacttaaa aaggccttga aggataaata gaaatagaag 420  
 cagagtagaa gggttattcc aggagaatat tagtttggat gagggcacag aggcaggaag 480  
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 atccagagct gagaggtgaa agaacagact ggaatagttc ttttcttttt cactctccta 600  
 ccttatttgc ttttggttta gcaaggagga tcgaaagtaa accaagagaa atggtggggg 660  
 gcacanaagg angtgggagg gaaactncag gatgagttat ggcacc 706

<210> 5376

<211> 506

<212> DNA

<213> Homo sapiens

<400> 5376

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 accagttacc acccagtcct ctcccaaggt agccaacatc ctgcaccca gatggctttc 180  
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 tgggaggccg aggcgggttg atcacttgag gncagagacc agtctggcca acatggtgaa 420  
 accctctctg ctgggagtag aagaattagc cgggcatggt ggcacgtgcc tgtaatccca 480  
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<210> 5377

<211> 851

<212> DNA

<213> Homo sapiens

<400> 5377

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 acaaaatggt aatagaccat tcattcattc atcaggaaat agctattaaa cacctactat 180  
 gtgctaagca cgttgggtatt attgggaata cagtgatgaa taaatcatat tcttttcctt 240  
 aaagtcactg ttactctttc cattttacag atgaagaaac ttgggctcaa agaagttaag 300  
 caactggccc aaggttctac tcccataagt ggcagagaag ggttttgaag ccagataccc 360  
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 cacaaccct tttccgggaa gagtgcctga caatactatt taatggattt cctggncaga 780  
 caactttcac catttcctta ggagacaggt ggtcaggaag caggaaagac taanatgatg 840  
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<210> 5378

<211> 682

<212> DNA

<213> Homo sapiens

<400> 5378

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 tgaccagctt ctggcagagg agaaggcagc tgtacttcgg gcagtggagg aacgtgagcg 180  
 ggccgaggca gagggccggg agcgtgagc tcgggccctg tctactgacac gggcactgga 240  
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ggaggcactg ctgagcagca aggatgacgt cggcaagagc gtgcatgagc tggaacgagc 360  
 ctgccgggta gcagaacagg cagccaatga tctgcgagca caggtgacag aactggagga 420  
 tgagctgaca gcggccgagg atgccaagct gcgtctggag gtgactgtgc aggctctcaa 480  
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 gctggccaag cagctgagag atgcagaggt ggagcgggat gaggagcgga agcagcgcac 600  
 tctgcccgctg gcttgccgca agaagctgga nggagagctg gangaactga angcttaaata 660  
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<210> 5379

<211> 791

<212> DNA

<213> Homo sapiens

<400> 5379

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 tcccctgagg tcaggagttc aagaccagtc taaccaacat ggcaaaagcc catcgctact 180  
 aaaaatacaa aaattagcca ggcatggtga tgcaggcctg taatcccagc tacttgggag 240  
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 aataaataaa ggaaattaag agaataagata aaattaaaag ttttttttac agttcagcaa 540  
 aattgacaaa ttttttagcta gattgactaa gaaacacaag aagactcaaa tatccaaaat 600  
 cagaaatgaa aatgaggcca ttactgngac tttaacaaca ttaagggtat cgtaagagaa 660  
 tactataaac atatgtacac cagcaaattg aataacaaaa tgaaatggca aatctctaga 720  
 aacacaaacc taccaggac tggatcaca aggaaattaa aaaatatggg tnaaacccaa 780  
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<210> 5380

<211> 851

<212> DNA

<213> Homo sapiens

<400> 5380

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ggaaaatgaa cgccagtgga tgtgtggaat tttttcacia agtaagtac ggggggtccct  180
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ctatgcagtg gcattacatn ctaccggtnc cactagccac ttgggactca accgataagt  840
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<210> 5381

<211> 840

<212> DNA

<213> Homo sapiens

<400> 5381

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 gccaaacttg tgaaaccttg tctctactag aaatacaaaa aattagccag gcatgatggc 240  
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 tccagctcaa aaacaacaac aagaacaaaa gtatcacatt ggcataagaa tagacatgta 360  
 aatcaaataa caaaatagag aattcaggta taaatcttca tatttatggc tgattgactt 420  
 tgaacaaagg tgacgaggca agtcagtata gcagcatatt cttttcaaca aatgggtgctg 480  
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 cctattagat gccagtggca tccctcccct gacacacacc tagttttgac aatctctgct 720  
 ncagatattc ccaaattgtgc cctggagagc aaaactgggt ncagttgaga ccattgacct 780  
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<210> 5382

<211> 815

<212> DNA

<213> Homo sapiens

<400> 5382

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 actttctggg cttgtggagc tggatatgca aaaaatgggt cccctacctc ttggtgaggt 180  
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 ccaacttcaa gttctacca cctgggtgca gggtgacctg tattgacccc aaccccaact 360  
 ttgagaagtt tttgatcaag agcattgcag agaaccgaca cctgcagttt gagcgctttg 420  
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tgctgagacc gggaggggct ttctatttca tggagcatgt ggcagctgag tgttcgactt 600  
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acctgaccag agagagctgg aangccctgg aacggccagc ttctctaagc tgaactgcag 720  
cacattcagg cccactgtc ctgggagtg tgcgccctca tatctatgga tatctgggaa 780  
anntgtgagc tgcagttaaa ncttgaaggc ttaaa 815

<210> 5383

<211> 768

<212> DNA

<213> Homo sapiens

<400> 5383

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ctgcatcagg agtccaggct aggttgctgg gtgctctgcc tagggtctca caaggcagaa 180  
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caggagaatc cctctccctt caactctcca acgttaagtg cttgcctcat tatatcagac 420  
ctgcccagga aaatctctct tttcatgaac ccaaagtcac ctgattaggg actttaattg 480  
cagctgtaaa atgagtcacg ggataatata ccatcatagt cacaagagcc actcatgac 540  
aaggagaggg attatgcagg gtgcatatac caggggtggg aatcttggag gccactcaga 600  
attctttcta ccaccagggc atgaggcaga tcataattat attataatat gagacatcct 660  
gacaagcata ttttttgaga tgaagtctca ctctatcgcc caggctggaa tgcattgggtg 720  
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<210> 5384

<211> 811

<212> DNA



<213> Homo sapiens

<400> 5384

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gaagccaaag ctgggagagt tttagtcacc tatctagggg aaagtgtgaa gatttcaaag 120
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accttgagtc ttttcanggt cagtctcaac tctcttagat gctagaggga tataggcagg 720
gctagcacag aacagaagcc agaaatagtc aaaatgaata ttttggactg gatanactca 780
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<210> 5385

<211> 774

<212> DNA

<213> Homo sapiens

<400> 5385

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gcatgtgcag gggaactgcc ctctataaaa tcatcagatc ttgtgacata tattcactac 180
cacgagaaca gcttgggaaa gatgcacacc cgtgattcga ttacctcctt ccaggctcct 240
ctcatatcac acgggaatta tgggagctac aattcaagat gagatttggg tggggataca 300

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gccaaacat atcattcatc atctgaggga actgtggtct cagacagctg ggcactgaga 360  
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ccacagaatc agtgtgcccc attccagtac ctatgatttc acctgnattc ttggcacttc 720  
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<210> 5386

<211> 759

<212> DNA

<213> Homo sapiens

<400> 5386

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tctctccctc tagtcccccc tatctctcat actctgcccc tctcccagcc tagactcaag 180  
tctgggtttc agctgccgcc agccctattg ctgctgttgc tgttctctgt ccttggccca 240  
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ccagcttcac ttacagggtt tcagcacaag ctgggtgtgtg tggggggccg tggggatatct 660  
gcctgcccc tgctactgcg tctgggtccc aaaagcccca cccctgnaca acttaaagct 720  
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<210> 5387

<211> 739

<212> DNA

<213> Homo sapiens

<400> 5387

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aaacagtttg atgatggtgg ctctgatgag gaagatatat gggaggaaaa gcacatcgca   60
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gactctgaag aagaagatgg agcaaagcaa gacttgtttg aaccacagcag tgccaacacg  180
gaggataaaa tggaggtgga cctgagtga ccaccaact ggtcagctaa ctttgatgtc  240
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gaggagccga tgccaactaa agagacgggc tgggcttctt tttcagagtt cacgtcttcc  360
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cccatggacc ctctgactcc cagtgcggct gccctggcag tgcagccaga agcggcaggc  480
agtgtggcca tggaagccag ctctgacgga gaggaggatg cagaaagtac agacaaggta  540
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acagagactg cggctcttcaa aagtgaggaa gggaaactgt ctacctctca agatgctgct  660
tgtaaagacg cagaggagtg tcccagact tgcanaagcg aagtgcgccg nngcccaagc  720
cttccagcag cagtcccga                                     739

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<210> 5388

<211> 798

<212> DNA

<213> Homo sapiens

<400> 5388

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gcgtcattcc tcttgatat agatgttttc ctggacacac cagctacaca ataagccagt   60
aaatctaagt ttgacctgct tggtattatt gggagcccta ggtatgtcaa aggcttttca  120
ccaagccagg gttattaatc aaagctgact ccctcgtatt gatcagacct caaatggctg  180

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tggtccatgc caccctgttt atatatgtct gtttaatttg cagccaccct gcgtgcactc 240  
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 cagatagtaa gtaattttatc taaattctta gaaaatcaat tcaactgctgc agccttgtag 360  
 gggtagaatc aagtcaattt gagcaggagt aaggtttggt ttgtgggaat aaaccactac 420  
 tcctgatagt gtttcttgat tatccgccgg cacttgtaaa tacatggaaa ggattgagct 480  
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 ctncggtctg cccccagaac taggtaaggt tgctgatgaa tgaacttagt tctgggtttc 720  
 atgaataaca attatcctaa tgtancaatt ctgaacaanc tctgtctctt cttggcaact 780  
 actntccact aggcacac 798

<210> 5389

<211> 701

<212> DNA

<213> Homo sapiens

<400> 5389

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 ttttgtagaa aaatgtaaaa cagtcattat agagatagga cataaaaaata gtagctaaca 180  
 cttattaagt acttgttgct tgtcacatgt tatattaaat gcccaaaaac tctttataat 240  
 gaattgggtt ataatacctc tgtttgactt aaaagatgct gatacagttt gaatatttgt 300  
 cccctccata tctcatgggtg aaatgtgatc cctaattgtt gacatggagc ctgctgggag 360  
 gtgtctgggt cattgggata gatccctctt aagtgacttg gtgccctccc catggtaatg 420  
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 cctctctctc tttgctccct ctcttgctat atgatgcgcc tgctcttcct ttgccttctg 540  
 ccatgatcgg aagcttctga ggccctacca gaagctgagc agatgctggt gccatgcttg 600  
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ttttttgaga cggagtcttg ctctgtcgcc cccangnnc a

701

<210> 5390

<211> 775

<212> DNA

<213> Homo sapiens

<400> 5390

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 actttaatca acactttaaa atattttggt attcttagcc ataatttatt ttgttctctt 180  
 acaagtgtc ttttagcagtt ttctggatca tcaaataaga gttcagtaaa atttactttt 240  
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 aacatggcaa ggattttaca gcaggaaaat gatttgthtt tgthtttcaa cattcctata 420  
 atccagagag ctgaagaaat ctttgatcta gaaagcttgg aaattcaaag cccctcaagg 480  
 cacttctttt ttttttttca aattaaagaa gaattaaaaa cagtatttgt aatggaaaat 540  
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 aagattttgg ccaagagtaa gttttaggtg tgatataaca taagtgcctc caaggtttgc 660  
 tagtgttact gacattctag agtggtggaa aaacactggc attaatgcag aattggagtg 720  
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<210> 5391

<211> 842

<212> DNA

<213> Homo sapiens

<400> 5391

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aaccatccag gtcacggggc accaaatttg agacaaatag tcggattaga aataaagcat 120  
ctcattttga gtagagagca agggaagtgg ttcttagatg gtgatctggg attaggccct 180  
caagaccctt ataaaaataa gccagggtgtg gcgggtgggtg cctgtaatcc cagctactca 240  
ggaggctgag gcaggagaat tgctggaacc caggaggcag aggttgcagt gagccgagac 300  
tgtgccactg cactccagcc tgggagacaa gagcgagact ccctctcaaa aaaaaaaaaa 360  
aaaaaagcaa atactctatt cccacatctc tcagtgtcca ttttgattct tttaaatgca 420  
tttcatttcc atctataaga agcaactata ttctcttcag gggaaaaaac tcaagtgtgt 480  
gatgctttgt ggcttactaa atatggtggc agatagttgc agaatttgtc caaatataaa 540  
ttgttaatga ctacttcccc ccccgccctc aatctgtggc cagatttttc ttattagtcc 600  
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aaacgactat ttgaatttca agaactgtgc tgcgaanacc tctgagacat ttgcaagtca 720  
ngggcatttt ccttgccctt gactgatgct atgccggaga ctgatacatt ttcttaatgg 780  
gncatggtca agccagggtc catgcctgaa ctggcttnac accagacctt cctcatatta 840  
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<210> 5392

<211> 352

<212> DNA

<213> Homo sapiens

<400> 5392

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ttatcaggga cttcaaattt gcatttgtcc tagaactcac tgctaggtaa atctgctaac 120  
tatgcgagac agagagctac ttattctctg ctttgagatt cccggaaaca gcatctacag 180  
ccttggacaa ggccatagtc tgttttacc ctattagctt aacaggctct accttctgcc 240  
ttgcttttgt ttctctact gtattttttt ttttttttt tttgagatgg agtctcgtc 300  
tgtctcccag gctggagtgc ggtggcacia nctcgntna ctgcaacctc cg 352

<210> 5393

<211> 720

<212> DNA

<213> Homo sapiens

<400> 5393

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gaaatactga tctgaaggaa ggaggccttg gggaccctga agcctgctcc cccatggcat 660
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<210> 5394

<211> 744

<212> DNA

<213> Homo sapiens

<400> 5394

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gcatcaccat ggagccgagg gcagggtgtct ccaaacagga catacgtgaa caaatttggg 60
gctacatgga atcacaaaat ttagctgact ttccccgacc tgttcatcac aggataccca 120
actttaaggg gtcttatctg gcttgccaaa acatcaaaga cctagacgtt tttgccagaa 180
cacaggaagt taaagtggac cctgataaac cactggaagg cgttcggctg ctggtgctgc 240
agagcaaaaa aacattgttg gtccaacac cagcactgag aacgggattg ttttaataaga 300

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tcacaccacc ccctggggca actaaagaca tcttgagaaa atgtgccacc tctcagggtg 360  
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 tgggatccgt cgccgtttct gaaaaaggct ggagaatcgg gaaggagaa ggctacgccg 480  
 atctggaata tgccatgatg gtatccatgg gcgccgtcag caaggagacg ccggtgggtca 540  
 ccatcgtcca cgactgccag gtcgtggaca tccctgaaga gcttgttgag gagcacgaca 600  
 tcaactgtga ctacatctc actccaacca gagtcacgc cacaggctgc aagcgcccaa 660  
 agccaatggg aatcacctgg ntcaagatca gcctggagat gatggagaaa atcccatact 720  
 gaggagcctt cgngcccnaa aaca 744

<210> 5395

<211> 781

<212> DNA

<213> Homo sapiens

<400> 5395

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 gaccgtggag gagtttctga ggcaggagca ttccagggg aagcgtgggc tggaccagga 180  
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 caccatccag accaggggga ctgcggagcc catcacggtc accattgtgc ctgcctacag 480  
 agccctgggg ctttctcttc ccaactccca gccacccctt gaggtctatg tgagcctgat 540  
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 cgngaaacat cggccaacta agctgaaaac cttctgcgcc tgggtgaaaca ctggtaccag 660  
 cagtatgtga aagccaggtc cccagagcc aatctggccc ctntctatgc tcttgaactt 720  
 ntaaccatct atccttggga aatgggtact tgaanaagac cagaatttca tgttggacca 780  
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<210> 5396

<211> 775

<212> DNA

<213> Homo sapiens

<400> 5396

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 gtcaatacac tgcaggactt gtatatctt tttcaaatat tcataatgtg tcactctagt 480  
 ggtaaagtat aaaatagcct attgccttga ggaacttcag atgggcacgc attttatacc 540  
 taagccaggt tagaagcttt taatcaagag aatatttgaa agttaaatca agccaggcgt 600  
 ggtggctcac acttgtaatc ccagcatttt gagaggctga agtgggtgga tcatttgang 660  
 tcagcagttc atgaccagcc tggccaacat ggtgaaacct tggcgctact aaaattccaa 720  
 aaaattancc cagtggtaat ggtgcatgcc tгнаатccca nctacttggg aagct 775

<210> 5397

<211> 670

<212> DNA

<213> Homo sapiens

<400> 5397

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atacctcacc accaaggagc agtttcacca attcctggaa gccaaagggc aggagaagac 180  
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<210> 5398

<211> 770

<212> DNA

<213> Homo sapiens

<400> 5398

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 catcaatagg tatccctagg anggcctgat tcagaagccc tcatttttaa actcaattct 720

tanatgaaca gtcttattca tctggaaggt ncacataatg ggcatcataa

770

<210> 5399

<211> 792

<212> DNA

<213> Homo sapiens

<400> 5399

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 gatgcagga cccaggacaa gggctcgcct aggagccaat gaagtgcctt tgggtggttg 180  
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 tgggaattnc ctgctaatag cattgaatgg tatgacctat catcgacagg ttgggaancn 780  
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<210> 5400

<211> 778

<212> DNA

<213> Homo sapiens

<400> 5400

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 cccaccctgc tgccacccca gaaggatctg gatagctcag cgatgggtga cagtgcacc 300  
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 gatgatttac tgaaatttga tgacctagat ggaacacatg ctctgatggt gggtctatgt 420  
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 ttggtgtccc cagagtttgt ggatgaagct ctgtgtgcgt gccangagta cttacaact 720  
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<210> 5401

<211> 623

<212> DNA

<213> Homo sapiens

<400> 5401

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<210> 5402

<211> 873

<212> DNA

<213> Homo sapiens

<400> 5402

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<210> 5403

<211> 727

<212> DNA

<213> Homo sapiens

<400> 5403

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<210> 5404

<211> 780

<212> DNA

<213> Homo sapiens

<400> 5404

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<210> 5405

<211> 797

<212> DNA

<213> Homo sapiens

<400> 5405

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<210> 5406

<211> 840

<212> DNA

<213> Homo sapiens

<400> 5406

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<210> 5407

<211> 782

<212> DNA

<213> Homo sapiens

<400> 5407

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<210> 5408

<211> 601

<212> DNA

<213> Homo sapiens

<400> 5408

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<211> 803

<212> DNA

<213> Homo sapiens

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<211> 777

<212> DNA

<213> Homo sapiens

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<210> 5411

<211> 739

<212> DNA

<213> Homo sapiens

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ccagtgtgca nagagcccct cgtgtatgat cttgcctcac tgaaagcagc ccctgaaccc 660  
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<210> 5412

<211> 642

<212> DNA

<213> Homo sapiens

<400> 5412

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<210> 5413

<211> 706

<212> DNA

<213> Homo sapiens

<400> 5413

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<210> 5414

<211> 673

<212> DNA

<213> Homo sapiens

<400> 5414

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<211> 728

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<210> 5416

<211> 791

<212> DNA

<213> Homo sapiens

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<211> 829

<212> DNA

<213> Homo sapiens

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<210> 5418

<211> 787

<212> DNA

<213> Homo sapiens

<400> 5418

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<210> 5419

<211> 791



<212> DNA

<213> Homo sapiens

<400> 5419

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<210> 5420

<211> 841

<212> DNA

<213> Homo sapiens

<400> 5420

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gaggcttatt tccgagtgga gtcgggtgcg ctggggcctg aggagaactt tctttctttg 180
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cttggcgctt tcttcctgga gcgagcgca ggcgcgaga ctgacaacgc ggtccacag 300  
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<210> 5421

<211> 834

<212> DNA

<213> Homo sapiens

<400> 5421

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 ggcaaaatca ataagcagct gaaaaaagtt ctgaagaaaa tagtaaaaga agcccatgaa 180  
 ccgctggcag tagctgatgc taaactagga ggggtcataa aggaaaagct gaatctcant 240  
 tgtatccata gtcctgttgt taatgaactt atgagaggaa ttcgttcaca aatggatgga 300  
 ttaatccctg gggtagaacc acgtgaaatg gcagctatgt gtcttggatt ggctcacagc 360  
 ctgtctcgat atanattgaa gtttagcgct gataaagtan acacaatgat tgttcaggca 420  
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 tggatatggct ggcatttccc tgaattagga aaaattatit cagataattt aacatactgc 540  
 aagtgtttac agaaagttgg cgataggaag aactatgcct ctgccaagct ttctgagttg 600  
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gtttcagaag aagatatttg caatattctg catctttgca cccaggtgat tgaaatctct 720  
 gaatatcgaa cccagctcta tgaatatcta caaaatcgaa tgatggccat tgnacccaat 780  
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<210> 5422

<211> 803

<212> DNA

<213> Homo sapiens

<400> 5422

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 ctttgccctg acctggaagg gcccagcctt gggctgaatg gcagcaccca cgcccggccc 180  
 tccggtgctg acccacctgc tgggtggctct ctccggcatg ggctcctggg ctgcggtcaa 240  
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 cgcctcagtg ccgcagccc ccatcaacgg acccctggcc cccgctcgac ttncctgagc 720  
 gttttccgcc agcaccttct tctggcactg actggccttc ttggtcgctt caactgnttg 780  
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<210> 5423

<211> 790

<212> DNA

<213> Homo sapiens

<400> 5423

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 agacccccga tgagaccgac tcgctggagt tcttggggaa tggcaacgaa ctggagtggg 720  
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 ttttggggac 790

<210> 5424

<211> 753

<212> DNA

<213> Homo sapiens

<400> 5424

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 aatccggagg ccagtagcac caggatatgt cttaaagagc tgggaacctt tgctcaaagc 660  
 tccatcgccc ttaccatcag tacaaccca agtttcagac ccttgtnca acccttgtaa 720  
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<210> 5425

<211> 762

<212> DNA

<213> Homo sapiens

<400> 5425

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 tgactacaga tttgcatctg ctggtgatga tggaattgta gttgtgtgga atgccagac 240  
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 aacagttatt gtgtgggatg gtgatactac cagacaagtt cagagaatat catgcttcca 420  
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 agaactgata attttcaggt tggtagcacc cacagaagga tcactagaat gggatatctt 660  
 tgaagttaag cgccttcttg atcaccagga taatattctc tcattgatta atgncaatga 720  
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<210> 5426

<211> 727

<212> DNA

<213> Homo sapiens

<400> 5426

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aacacgattc ctctggccag gccaaagggga gggcgacact gacaggcgcc cccaccccag   60
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cctcttccct tcctcatcct gcagcccgcg cctccccctt cgccgcgctg cgacaggatg  180
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cagccccccag cctacacccc cacaactggc cactccaaat ttgcaacaag ttcttttccc  660
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<210> 5427

<211> 693

<212> DNA

<213> Homo sapiens

<400> 5427

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ttactaaatc tggctcgaag tcacagtttg cttactgcat gctgatccga attgccagtc  180
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gcttgcgaaa taaacatgaa atggttattt atgaagctgc ttcagctatc atccatcttc 300  
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 accggctcat gaagcagata tcttcttttg tgtctgaaat ctcagatgag ttcaagggtg 600  
 tggttgtcag gcaattagtg ctctctgtca gaaataccct cgaaagccca gtgtcatgat 660  
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<210> 5428

<211> 781

<212> DNA

<213> Homo sapiens

<400> 5428

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 cgaggtggcg gcggcgggcg agcgggagcg ggtaccgggc gcgggcagag cgcgcgggcg 180  
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 gatcttttgc taatgatgat cgccatgtta tgggtgaaaca ttcaacaatc tatccatctc 420  
 cggaggaact tgaagctggt cagaatatgg tatctactgt tgaatgtgct cttaaacaatg 480  
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 taatgaggat tggcctgggt gcaaaaggct tgctgattaa agatgatatg gacttggagc 660  
 tgggtttaat gtgcaaagac aaaccacag agaccctggt aaatacagtc naagataatc 720  
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<210> 5429

<211> 817

<212> DNA

<213> Homo sapiens

<400> 5429

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atttgcagct tccttcaaaa gtcctattac tagttctcca cccaaatgga tggctgagat  180
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<210> 5430

<211> 649

<212> DNA

<213> Homo sapiens

<400> 5430

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<210> 5431

<211> 828

<212> DNA

<213> Homo sapiens

<400> 5431

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<210> 5432

<211> 486

<212> DNA

<213> Homo sapiens

<400> 5432

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tcagggattt gggatgaagt gaagaggtca aattactttt tagaagaagg gaatctaaaa 180  
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gttttgctct tgttgcccag gctgtatcgc aatggcgcggt tctctgctca ctgcagcatc 360  
cgctcccggt gttcgggcgg ttctcctgcc tcagcctccc gagtagctgg gattacaggc 420  
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<210> 5433

<211> 651

<212> DNA

<213> Homo sapiens

<400> 5433

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<210> 5434

<211> 704

<212> DNA

<213> Homo sapiens

<400> 5434

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caatggccgg gaggggctcc tgcgcttcag ttcctggcca ttttctatcc aagatgtggt 600  
acaacctctt accctgcaag ttcagagacc cctggctctt gtgacggtgt cagatgcctn 660  
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<210> 5435

<211> 857

<212> DNA

<213> Homo sapiens

<400> 5435

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gttgtgtgta ggaaatttct ttggctccac ccaagatgct gaatgggagg agtataagac  180
tggcatcaag aaagggagaa gtggatacca aaaaatgtgg ttctgctttg gtttccagtc  240
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<210> 5436

<211> 498

<212> DNA

<213> Homo sapiens

<400> 5436

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gtgagtgtgg ttttctccag agtgggagtt aaccagtatg taggaggaag ggtgtttcag  120
ggccatagat gtgtcctgct ataacttcgt agtcctggat gctgtaataa ggcctcctgc  180

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agaccttcgt tctattccac agctgcccgg ggtgtttata aaagtgaac ttcaaggttt 240  
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ctgtcctggt ccaaggtaga gagtgtgcaa ctgaaaatag ggacgctgtg gactttctgg 360  
gccaaagttcc ccgtctagat gtgttgggcg cctttctttt tttttttttt tttttttgag 420  
acactttcgc tctgttggcc actctgggtg caatgagctg agattgcacc actgcactct 480  
aaccngggng acncagca 498

<210> 5437

<211> 829

<212> DNA

<213> Homo sapiens

<400> 5437

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gtcactcaag atctaggtct cgtgaaagac gccatcgtag tagaagcagg gagcggaaga 180  
agtctcgatc caggagtagg gagcggaaga aatcgagatc cagaagcaga gagaggaaga 240  
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tccaatgaaa tttgcttgaa caagagaaaa aaangaaaa tgctttggca gggccaggaa 780  
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<210> 5438

<211> 735

<212> DNA

<213> Homo sapiens

<400> 5438

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tggaagaaga ggtgtctaag cgctcgcgga aggaggagga agacctggaa gcgctcatag 180
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ggatggtggc ctggaagaga caattgatcc tgtttggtgg cttncatgaa agtcacngga 660
ttacatctac tacaacgacg tgtatgcctt taatctggac acctcacat ggagcaagct 720
gtccccgtca nggac 735
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<210> 5439

<211> 782

<212> DNA

<213> Homo sapiens

<400> 5439

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agatgccggc cgtgtccaag ggggacggga tgcggggcct ggcggtcttc atctcggata 180
cccgcaactg taaaagtaaa gaagcagaaa taaaaggat aaacaaggaa ctggcaaata 240
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tcagatcaaa atttaaaggt gacaaggctc ttgatggcta tagtaaaaaa aagtacgtct 300  
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 tgaacctgct gagttcaaac agatacacgg aaaagcagat cggctacctt ttcattctctg 420  
 tgttgggtgaa ctcaaacagt gagctgatcc gcctgatcaa caacgccatc aagaatgacc 480  
 tggccagccg caaccccacc ttcattgggccc tggccctgca ctgcatcgcc agcgtgggca 540  
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 actatggaca gcgtgaagca naggcgggcc ctgtgcttgc tgcgcctgta caggacgtcc 660  
 ccgatcttgt ccccatgggc caactggaca ttccgagtgg tgcacctgct caatgaccag 720  
 cacttgggtg tggttaactgc anccncaagt ctgatacccc acttttagcn cagaagaacc 780  
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<210> 5440

<211> 660

<212> DNA

<213> Homo sapiens

<400> 5440

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 gactgggatg gaaaggtgtc tgagattaag aagaagatca agtcgatcct gcctggaagg 180  
 tcctgtgata tactgcaaga caccagccac ctgcctcccg agcactcgga tgttggtgatc 240  
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 ctcttttcag ccagctttct acggaacatc aatgagtacc tggccgtagt cgatgctcct 480  
 cccctggacc tccggttcaa cccctcgggc tacctcttgc tggcttcaga aaaggatgct 540  
 gcagccatgg agagcaacgt gaaagtgcag aggcaggang gagccaaagt ttctctgatg 600  
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<210> 5441

<211> 796

<212> DNA

<213> Homo sapiens

<400> 5441

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tactaccgcg cggactttga cccatcaaag atccccaac tcaagctccc caaagaccgg   120
cagtacgtgg tgcggtgat ggcccccttc aacatgaggt gtaagacgtg cggagaatac   180
atctacaagg ggaagaaatt caatgctcgg aaggagacgg tgcagaacga ggtctacctg   240
ggcctgcccc tcttccgctt ttacatcaag tgcacgcgct gcctggcaga gatcaccttc   300
aagacagacc ctgaaaacac agactacacc atggagcatg gagccacgcg gaatttccag   360
gctgagaagc tcctggagga ggaggagaag aggggtgcaga aggagcggga ggacgaggag   420
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gtgctggaga acctccagga gctgaaagac ctgaaccagc ggcaaggcga cgtggacttc   540
gaggctatgc tgaggcagca cgcctgtcg gaggaggagc ggcgaggca gcagcaggag   600
gaggacgagc aggagaccgc ggccctgttg gaggaagcca gaaagcgaag actgctggag   660
gacttccgac tcagaggatg angctgctcc ctgccccctt gcaagcccag cccttttggg   720
cccaacccca ccggcattcc tggattgaag ccccaaaagc cccaagangg aaaggtggaa   780
ggtncggga accana                                     796
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<210> 5442

<211> 640

<212> DNA

<213> Homo sapiens

<400> 5442

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ctactgggag aggctcctgc taggctcagg cagtgggcaa gccagcgtca gcctgcgact   60
gacctccccg cttaggcctc ccgagggcgt ccggcttagg gaaaagacac tcacagagca   120
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tgcgttgctg gggaggcagc ccaggacgcc tgagcggcag aaacatgtg cacaggaggt 180  
 ccctgggaga acctttggga gcgcccagga cctggaggct gccggcggtc ggggacatca 240  
 ccgaatgggt gcagtttggc aggagcctca tagtctcctc ggtggccagg agccctcgac 300  
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 ccggcatagc tcctcctggt gcggcaccag cgcattccaca cggccgagaa gncctttcgc 600  
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<210> 5443

<211> 903

<212> DNA

<213> Homo sapiens

<400> 5443

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 gaatgttttc ctctaagaca aaatcagcag atgagcaaag catatatgaa aaggagagaa 180  
 tagcacatgc aaaacaaatt ataaagccat ttattctcag aagagtaaaa gaagagggtc 240  
 tcaagcagtt accccccaag aaagatcgaa ttgagttgtg tgcaatgtcg gagaagcagg 300  
 agcaactcta ttgggtctt ttcaacagat tgaaaaaatc tatcaataac ttggtcacag 360  
 aaaaaaacac agaaatgtgc aatgtcatga tgcagttgag gaaaatggcc aatcatcctt 420  
 tattacatcg ccaatattac acagctgaaa aactcaagga aatgtctcag cttatgctaa 480  
 aggaacctac acattgtgag gctaaccctg acctgatctt tgaagatatg gaagttatga 540  
 cagacttcga actacatgta ctttgtaaag agtaccgaca cattaataac tttcagttag 600  
 acatggactt gatttttagat tctggaaaat ttcgagtttt aggatgcac ttgtctgaat 660  
 tgaaacagaa ggggtgataga gttgtgttat ttagccaatt taccatgatg ctggatatct 720  
 tagangttct attaaaacat catcagcata ggtacctcag attagatgga aagactcaga 780

ttctgaaang gattcatcta attgatgagt ttaataccga tatggatatac tttgggggttc 840  
 tgnntttcaac aaaagctggt ggantaggaa tagactgact tcagccaaag gtggtatact 900  
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<210> 5444

<211> 845

<212> DNA

<213> Homo sapiens

<400> 5444

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 ttacagaaac agattcgaca actggagagc cacctgagcc ttggaagaaa gcttctacgc 180  
 ctgggtaact cagcagatgc ccttgagtca gccaaaagag ctgttcacct atcagatggt 240  
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 aatgtcctgt gggctggaaa gtctggactg gctccccgtg tggatcagga gaagtgggcc 360  
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 gagattcgcc tactgatgga gcaagagtct tctgcttgta gccggcgact gaaaggttct 480  
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 cttagaggtc atccccact tctgctagac gtggtcagaa atgcctgtga tctcttcatt 660  
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 gtgtcctnca tcctgtctatt ctaccctaata ctatccctgg ctacgactca agccctgact 780  
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<210> 5445

<211> 856

<212> DNA

<213> Homo sapiens

<400> 5445

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tttacagtgt gtcctccaag tgcagaggtc tctgggggtg ggaccattgg cctctgtgtc  180
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<210> 5446

<211> 713

<212> DNA

<213> Homo sapiens

<400> 5446

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ataaccctc attgttcgca gctgatgtca ctgcagttg tgagcggccg cctctcccgg   60
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ccccagcgag agccggccag gttgcagcgc ggacacactc gcaggtcgt gtggccccag  180
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tcaccctcac gctgcggatg ctgatgcacg ggaaggaagt gggcagcatc atcgggaaga 300  
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 aggtggcagg ggacctgctc cccaactcca cagagcgagc tgttacngna tctgggggtgc 660  
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<210> 5447

<211> 794

<212> DNA

<213> Homo sapiens

<400> 5447

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 gagaataatg gcagtaagaa agatggcgtg tgtggctctc ctccatcaaa gaaaatgaag 180  
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 cagtgtccca tcgtcttatg cggatggcgg ggaaaggcct ncattcgaac ttttgtgccc 720  
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<210> 5448

<211> 815

<212> DNA

<213> Homo sapiens

<400> 5448

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aaaaaaaaa acacaggctt gatgctcgct cccgtttcta caggaggttt tgacggctgg 60
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ccacttgctc actggggccc tggggacacc gccacactcg agcccatcct acggcctcaa 180
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nggattcgga agtatgacta caaccccagc tttgccatcc ggggccttca ctatgacatt 780
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<210> 5449

<211> 847

<212> DNA

<213> Homo sapiens

<400> 5449

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taatccacac ctactactca atacctcaga aaatcttcgc ticcctaata atgttgaacc 60

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 gaacatggag gatacaaatt cagtgtcca gttgtgcaa gttctttcaa ttttggaggc 720  
 ccacaccag ggatgaattg agttatctct ttctttcctg ctggngcct tgtagtgaaa 780  
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<210> 5450

<211> 721

<212> DNA

<213> Homo sapiens

<400> 5450

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 gcttctcgtc gcagagcaat gtgtacgggc tggcaggcgg cgccggcggg cgcggggagc 180  
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 ccggctctga gtacaacctt gactctattg cccagagctg cctgaacctg gagctccagt 480

tcactccgtt ccagctgtgc catgcggagg tccaggtcgg ggatcaactt gagactgtgt 540  
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 agtttgagga acagcccgtg gaaaacctct tcccagagct gacgaacctg accagtancg 660  
 tcctctggct tgacgtncac aactttcccg gcacgtcccg gcgcctntca ctcttggctt 720  
 g 721

<210> 5451

<211> 807

<212> DNA

<213> Homo sapiens

<400> 5451

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 tgggggcctg actctcttac tgctgtgac gctgctggcc ttgtccgggt actcagggt 180  
 actggctggg gtggaagtga gtgctgggtc acccccacac cgcaacgtca ctgtggccta 240  
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 gctcatcgac ctctaccaga aatttggctt caaggtgttc tccttccgg caccagcca 480  
 tgtggtgaca gccaccttc cctacaccac cattctgtcc atctggctgg ctaccgccg 540  
 tgtccatcct gccttgga cctacatcaa ggagcggag ctgtgtgcct atcctcggct 600  
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 ctatgtgcct gagatgaagg agacagaatg gaaatggcgg gggcttgtgg angccattga 720  
 caccgaagt gatggcacan gaactgacac aatgagtgac accaattctt gtaaccttgg 780  
 aaatgaaccc ctggcaancc gggaaac 807

<210> 5452

<211> 737

<212> DNA

<213> Homo sapiens

<400> 5452

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tgaaagcact agtggcttgc cagattgtcc taccagaccc aggtattgca ggctttactg   60
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ctcaggcacc taacaatcac ttacttgctt tagatcactc aaatagtgat ctcagcagca  180
tatatacttc tgacagcact tctgattttt tcaagtcctg cagcaaggat actttttcaa  240
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atttttcagc ttcagaacaa agtaaggcct ctggtactct tcagcagaac agaaagtcca  360
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gccttgtttc atatatggat aaaaagagta cagcagaaaa gttgggtaaa gaacttggct  480
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acagtgcagt ggaaattaaa aataggtccc agcatgagct accatgtttt cagcatcatg  660
gtatagatac cccaactagc cttcagaaga gatctgcatg ttggccacct tcgntactta  720
nacttgaaga gacagnc                                                    737

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<210> 5453

<211> 720

<212> DNA

<213> Homo sapiens

<400> 5453

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tatgctttaa ctggacagaa gaaatatttc tcagacaatg tcgatgctgc tgatgacaac   60
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tggtggcaga aatggctttg gggtaggtgt gaagtcgctt cagtcctctt gagttgcctc  180
ttctggatgg aacgtgtgta tcaacaacaa tgaaatgcac ctccgtgtgc atggaggcgg  240
ctgatgagaa tacagatagg ccagtcctcg ctcttccttc cagaaccggc cgctcccggt  300

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ctgacgttgg agcacgtgaa ctaagagtga caatitttttc tacttgcttc tgtgaataaa 360  
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aagaggctcc tcctgggagc aggagagaga gagtttgtga tgttggttgg aaaataggat 660  
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<210> 5454

<211> 805

<212> DNA

<213> Homo sapiens

<400> 5454

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tcaatgaggt gaagatttac agcctcagct gcggcaagtc ccttcctgag tggctttctg 180  
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ccttgaagtt tgaaagggtg ttagattcag aagttgtcac ctttgaaatt ttgtctgatg 420  
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acaatctctg ctttgaaatt taatggtgcc ttgaccatgg cagttggaac aaccacaggg 720  
caggttttat tataatgacct tcgatctgat aagccattgc tagttnaaga tcaccagtnt 780  
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<210> 5455

<211> 765

<212> DNA

<213> Homo sapiens

<400> 5455

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agaccctcag cctgcctgct gaggccatgt cggactacga gaacgatgac gagtgtctgga  180
acgtcctgga gggcttccgg gtgacgtcga cctcggatcat cgaccctca cgcatacacac  240
cttacctgcg gcagtgaag gtcctgaacc ctgatgatga ggagcaggtg ctcagcgacc  300
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gccacaaggg ctacgtggcc ttcctcgaga gcctggagct ctactaccg cagctgtaca  420
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gcctgctgcg caagcaccag gagcgtgtgc agaggctcaa ggaggagtgc naggccggca  660
gccgcgagct caacgtgca aggaggagaa ctacgacctg ccatgcgcct ggcgaccan  720
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<210> 5456

<211> 824

<212> DNA

<213> Homo sapiens

<400> 5456

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cgaaccccg tcccaccaac cctctcagct cagacgcggg gtgctgagtc acgggggggg  120
ggtggttctg tggatagttg gaatgcatac acagaggaaa ggggggatgcg gcaccagcag  180

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acagagagac aagaccccag ccagcccctg tccaggcagc atggcacata ccgccagatc 240  
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 cactacacca ttgggaagga gttcatcgac ctgctactgg accggattcg gaagctggct 360  
 gaccagtgc aaggacttca gggcttcctg gtgttccaca gccttggtcg gggcactggc 420  
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 aaagcaatct atgacatctg ccaccgcaac ctagacattg agcgcccaac tacaccaacc 660  
 tcaatcgctt cattagccaa attgtctcct tcatacagct tctctgcgct ttgacggggc 720  
 ctcaatgtgg acctgacaga gttncagacc aacctggggc cctaccttac atncactttc 780  
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<210> 5457

<211> 745

<212> DNA

<213> Homo sapiens

<400> 5457

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 aattccttct ttcgatatga aggagaatgg aaagcaggga ggaagcacgg tcacgggaag 180  
 ttgttattta aagatggcag ttattacgaa ggggcgtttg tggacggaga gatcacggga 240  
 gaaggccgcc ggcactgggc ctggtcagga gacaccttct ctggacagtt tgttctggga 300  
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 tcccacggca tgcgggaagg acacgggttt ctgggtggacc gggatggaca agtgtaccag 420  
 ggctccttcc atgacaacaa gaggcacggc cctgggcaga tgctctttca gaacggtgac 480  
 aagtacgacg gcgactgggt ccgggaccgg cgtcaggac acggggtgct gcgctgcgcc 540  
 gacggctcca cctacaaggg acagtggcac agcgacgtct tcagtggact gggcagcatg 600  
 gcccactgct caggggtcac ctattatggg ttgtggatca atggccaccc agcagaacaa 660

gctacnagga tcgtgatctt ggggtcccgag gtgatgaagt ggcccaaggg tctccttntc 720  
ggtgaacgtt cactgctgan gacac 745

<210> 5458

<211> 802

<212> DNA

<213> Homo sapiens

<400> 5458

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aggcttcaac atgaagagga taagaagtca gcaatgtctc aacttttgca gttgaaagat 180  
cgagagaaaa atgcagcaag agattcatgg cagaagaaag tagaagatct cttaaaccag 240  
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caactgcaag cccagtttac gcaagaacga cagcggttta cgcaagagct tgaagaatta 360  
gaggagcaac atcagcaaag acacaaatca ttaaaagaag cacatgtcct tgcatttcaa 420  
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atgcttgctt ccttgcgctc agaactcaac catcaacatg cagctgcaat tgatttggtta 660  
cggcataatc atcatcaaga attggcagct gctaaaatgg aattagagag aacatagaca 720  
tcagcagaaa gacagagtaa nggagcccca tatgtaggaa ttacnggatc taccaggang 780  
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<210> 5459

<211> 867

<212> DNA

<213> Homo sapiens

<400> 5459

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 gccattcagt tatctggagc agaacaacta gaagctttga aagcttttgt ggaagcaatg 180  
 gtaaattgaga atgtcagctc cgtgatctcg cggcagttgc tgactgattt ttgcacacat 240  
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 cagcctagag tcatttcatt tgaggagcag gttgcttcca taagacagca tcttgcacat 360  
 atatatgaga aagaagaaga ttggagaaat gcagcccaag tgttggtggg aattcctttg 420  
 gaaacaggac aaaaacagta caatgtagat tataaactgg agacttactt gaagattgct 480  
 aggctatatc tggaggatga tgatccagtc caggcagagg cttacataaa tcgagcatcg 540  
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 tacaagacaa tagtccacga aagtgaaga ctagaggcct taaaacatgc tttgcaactgt 720  
 cgatcttagc atcagcaggg cagcagccgt tctcgatgc tactactctt ttaaggatga 780  
 aaggtgccac aacttgctgc ctatgggatc ctagagaaaa gnatctagat aggatcatca 840  
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<210> 5460

<211> 762

<212> DNA

<213> Homo sapiens

<400> 5460

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 ttgtaaaaat ggaatttcaa gcagtagtga tggcagtagg tggaggatct cggatgacag 180  
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 acccattgaa cctgcttgag cgtgttgat ttgaagaagt cattgtggtt acaaccaggg 300  
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ttcctgatga cgctgacatg ggaactgcag attctttgcg ctacatatat ccaaaactta 420  
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 ttggagtggg cagcacagga aagaggctgc tcttcatggc taatgaagca gacttggatg 660  
 aagaactggt cattaaggga tccatcctac agaagcatcc tagaatacgt ttncacacgg 720  
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<210> 5461

<211> 505

<212> DNA

<213> Homo sapiens

<400> 5461

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 ctcgcctncc gccaaagtgg ctgtgaacca cgtcctgcgc aacctctcgc tctccaaaac 180  
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 ggccgggtcc caggccctgg ggtttcttcc gcccgggagt ccacgccctg atgctggggg 420  
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<210> 5462

<211> 776

<212> DNA

<213> Homo sapiens

<400> 5462

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 aatgcccatt tgacgtataa gttcctcaca ccctatctct atgacttctt agatgccctg 180  
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 aaggaggaag agcagctctc ttatgatgac ccaaatagga aaatgtacca tctctgcatt 720  
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<210> 5463

<211> 812

<212> DNA

<213> Homo sapiens

<400> 5463

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 ggactgtgat ggagagaaga gagaggactt ggaacagctg cagcagaagc aagtcaatga 420  
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acagaacagc gtgggatggt cacaaaggag tgtgaacaag aatgtgaact ttgccattac 720  
ttgacctgga gagcggccgt gaagatgaag ctggccttgc attcagagtc agangncttt 780  
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<210> 5464

<211> 820

<212> DNA

<213> Homo sapiens

<400> 5464

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ctacggcgct gtggccaagt ggctcaccaa aattgaggtt ccgaaaacag aacagacttt 180  
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<210> 5465



<211> 768

<212> DNA

<213> Homo sapiens

<400> 5465

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ctctggtgct acacaatggc cttatagact tgggtggctc gtaccagaac ttntatgcnc   720
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<210> 5466

<211> 771

<212> DNA

<213> Homo sapiens

<400> 5466

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gaaccggcgg ctactgcgca ccagcccgcc tgtacgagct ttcgcaaag agcttttctt   180
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 gctttttggg ctgcaagtcc cagaagaata tgggtggcctg ggcttctcca acaccatgta 420  
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 catcctcaat ggcttcaagg tctggattac taatggagga ctggncaata tttttactgg 720  
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<210> 5467

<211> 787

<212> DNA

<213> Homo sapiens

<400> 5467

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 accctgtctc tgctaaaaat acaaaaatta gccaggcgtg gtggtgcaca cctgtggtcc 660  
 cggctacttg ggaggctgag acaggagaat tgcttgaacc caagaggcag angtcgcagc 720  
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787

<210> 5468

<211> 796

<212> DNA

<213> Homo sapiens

<400> 5468

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 agaaaagcca catggtgttc cgagtggagg tgctgtgcag cgggcgcaga cacacggtgc 180  
 caaggcgcta cagcgagttc cacgcgtgc acaagcggat caagaagctg taaaagtgc 240  
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<210> 5469

<211> 828

<212> DNA

<213> Homo sapiens

<400> 5469

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aaatggtgct ttgaagaaga gtctcacagc caagcaggtc caggcggatt tcataactct 360  
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actgctctga aaagcacttc actcacaggc ctgtgggatg ctccatggg gnccttgctt 780  
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<210> 5470

<211> 852

<212> DNA

<213> Homo sapiens

<400> 5470

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 gttgtggcag ctgttcggga aagtgcaact acctagtatc tcagcagaat atgcttctga 780  
 ttccctacatc ggtttcacca ctggaatagt ttctactgga aatccaaaca tttcattact 840  
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<210> 5471

<211> 798

<212> DNA

<213> Homo sapiens

<400> 5471

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 cttgaaagtt ccaactgctc aaaccacccc accaaggact ctgaacctgt ccaccccggg 240  
 cgcatacaaga tcttccagct gggtagcccc gatttgggcc gactttgcac ctccaaacaa 300  
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 cgggaaagtg agttcagaga gtggaacaag tggccaattc actccccct ctagcacctc 720  
 agtcccagacc attgccagca gcaatgctnc tgngnctatc tggagcccaa ctttcatctc 780  
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<210> 5472

<211> 669

<212> DNA

<213> Homo sapiens

<400> 5472

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<210> 5473

<211> 749

<212> DNA

<213> Homo sapiens

<400> 5473

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gtttcagaat tggctgatgg tcgtgagtgc aggtgtccct gttgtaattt gcagggaaat  180
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 atgtctaaag acccactgct ctgagatgtg gtcagagagg tttctgtgga ctgcagatga 480  
 ggcctgagcc ctgcctatgc tcaaagccat cagggttggg ggtccgcctc ctcactgctc 540  
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 ccagacttc cttccctgga gtgtagacct gtgtgtggga cctgctccag gctgatccct 660  
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<210> 5474

<211> 554

<212> DNA

<213> Homo sapiens

<400> 5474

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 gccaggtggc ctcggcgcgc ccgcctcgcc cgggcaccga gcaggaagtg gctgcggcgc 180  
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 tttaggaaac ttggtgatca gtatttctct aaatattcag aaatattctc accttcagct 480  
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<210> 5475

<211> 855

<212> DNA

<213> Homo sapiens

<400> 5475

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ggaattttga gccaagcttt aaacaagtct tggacttctg agacttctgg ggtctagtca 780
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<210> 5476

<211> 766

<212> DNA

<213> Homo sapiens

<400> 5476

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acggagacca gcagtgcagt catgtgcctg gaccttgacg cttcctggat gaagtgcgcc 240  
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<210> 5477

<211> 523

<212> DNA

<213> Homo sapiens

<400> 5477

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 cctccgtgat gtggccagat cgggggtggc ctctctccca cctgccaagt gccagcacca 420  
 ggagtccttg ggccgaccga gacccactc agnaccctca ctgggcacct caagcctgag 480  
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<210> 5478

<211> 776

<212> DNA

<213> Homo sapiens

<400> 5478

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cttctgctgg tgtgagtgcc ctcaggggtt cccaggaat atcgatacaa caccaacagg 240
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<210> 5479

<211> 800

<212> DNA

<213> Homo sapiens

<400> 5479

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 ccgggacctt atctccagcc ttcaggaact gtttgctccg tgggacagaa cccacaggac 720  
 gtggttcang ccattggcaa cgtcatcagc ttngacttga acacccttg ngcccagacag 780  
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<210> 5480

<211> 780

<212> DNA

<213> Homo sapiens

<400> 5480

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 gctatggctc cactaccagg tgtggtacag atncaggggg gacatnacc agcttgtcca 720  
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<210> 5481

<211> 827

<212> DNA

<213> Homo sapiens

<400> 5481

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 tatcatgaat aatgaaattc cagaagaaat gacagcagat gaaacaaagg actatatgaa 180  
 tcaactttca catgaagtac tttgccatat ttttaggtac ctccctctgc aggatatcat 240  
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 tcaaacttta catttagttg gggatgaatg tcctgaaatt ccttgatcc caatgctaag 720  
 gcacctttat atgaagtggg taagactcct taaccccagc catttaaaga cttnctttgg 780  
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<210> 5482

<211> 788

<212> DNA

<213> Homo sapiens

<400> 5482

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 gtgggaaact acctccgtat gttccgaggt tctctgtaca agagataccc ctcactctgg 360  
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 cgcttagntc ttccactttg atgaaccatt gaccanctt gtgaatccat tgaggaacgc 780  
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<210> 5483

<211> 830

<212> DNA

<213> Homo sapiens

<400> 5483

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 caacagaatc ttggtcaact ttgaaggtag cagctgatct tcagctgtct acaccacaga 720  
 aagcaagtca acaccaagtt ttatTTTTGG tAtcagatgt acacatgcta agaattccacc 780  
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<210> 5484

<211> 813

<212> DNA

<213> Homo sapiens

<400> 5484

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 gcagatggca tccttcggtt cttccagaca agctgcaaga cgctgaccat ggccaagatg 180  
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 gtgccaagc ccctgtgcga gaaaggctctg gcagccaagt gctttgacat gccagtgtcc 360  
 ctggatggag ataccaacac atccaccag gaggtggtac aatacaactg ggagactggg 420  
 gatgaccggt tctccttccg gagcttccgg agtggcattgt ggctatcctg tgaggaaacc 480  
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 tttggangga agcggttgat ggagaaagct tcccttcctt ccccttcctt ggggctttgt 660  
 ggcaaaaatc ctatggttat ccctgggaac gcagatcacc tacatcggac ttcaattcat 720  
 cagctttctt ctgttctaac agacttgcta ctcactggga acccttgctg tgggcttcaa 780  
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<210> 5485

<211> 684

<212> DNA

<213> Homo sapiens

<400> 5485

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tgccaattct caggtcggat ttgaatccac tgcttttcaa ctcataaaca tcaactgctgg 180
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cagattacat gtacaaagac tatttgggtt ccacagcgat cttattaaag nttcttatca 600
gaccactgca ggaagcgcca agccactgga agattttgag cctgttcaga atggggaact 660
gntttttcaa aaattncaaa ctga 684

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<210> 5486

<211> 675

<212> DNA

<213> Homo sapiens

<400> 5486

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cgcacaacgt gaacctgcag cagaagcctt gcgcctacca cccgggcgat aaatacccgg 60
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acccagctt cgccagctcc taccaggcga tgcccggcta cctggacgtg tcggtggtgc 180
ccgggatcag cgggcacccg gagccgcgtc acgacgcct catccccgtc gaaggctacc 240
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gcagctaccg ggcggggcgc aagaaacgcg tgccctacac taaggtgcag ctgaaggagc 420  
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gaagaagggtg gtcaagcaaa tcgaaagcgc ctcatcttca cttcaccttg accacccacc 600  
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<210> 5487

<211> 747

<212> DNA

<213> Homo sapiens

<400> 5487

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ctggcccggc agcgctacga ggaccaactg aagcagcagc aacttctcaa tgaggagaat 180  
ttacggaagc aggaggagtc cgtgcagaag caggaagcca tgcggcgagc caccgtggag 240  
cgggagatgg agctgcggca caagaatgag atgctgcgag tggagaccga ggcccgggcg 300  
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tccgagcacc gtcagaccgt cttggagtcc atcaggacgg ctggcacctt gtttggggaa 420  
ggattccgtg cctttgtgac agaccgggac aaagtgcagc ccacggtggc tgggctgacg 480  
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gcgctgcggc accccatcca ggtagcccg gcggttctca gtcgaccca ggacgtgctg 660  
gaagggtgtg ngcttantcc caacctggaa gcacggtgcn cgacattggc cttacaacca 720  
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<210> 5488

<211> 789



<212> DNA

<213> Homo sapiens

<400> 5488

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ccgtcagagc ctaggggagc ctgccctccc gcgcctcgtc ggggcccggc caggcacctt  180
ggccgccggc gcacgggacg gggcacgagc actagatcac ggctgctgga cctcggcacg  240
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gtatctggag agtgatcttt aagccccctg acccagataa tacatTTTTT aagcagatta  660
aatgaatttt tagcgggaga aggcatgac agtgggtgag ttgancaaaa gctcttttga  720
catgaaaatg gnttccttaa acccagaacc agggcattga atcccnggaa atggggggcc  780
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<210> 5489

<211> 689

<212> DNA

<213> Homo sapiens

<400> 5489

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gttagcggca gcggcggcgg gttcgggccg cttttcctgc cggatgtgtg ggcggcggcg  180
gcggcagcgg gctcccggcc tcagccgctg cccacggggc cgcgctgctt agccactggg  240

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accccacgct cagctccgac tgggacggcg agcgcaccgc gccgcagtgt ctactccgga 300  
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 atgggaaagt ctgcttgagt attctaggta catggactgg acctgcctgg agcccagccc 600  
 agagcatctt ctcagtgtc atctctatcc agtccctgat gactgagaac ccctatnaca 660  
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<210> 5490

<211> 804

<212> DNA

<213> Homo sapiens

<400> 5490

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 aacactgaat cctcagatgc tgcagaagaa attccgggggt aagcctacag aggcctccat 180  
 agaagcaaga gtacaagaat atggagaatt agatgctaaa gattacattc caggagcaga 240  
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 cagtctcagt gaggaggagg atgctgatgg tgaatggatt gatgtgcaac actcttccga 360  
 tgaagaacag caagaaatct ccaagaagct gaacagcatg cccatggagg agcgggaaggc 420  
 caaagctgca gccatcagca ctagccgagt tttaactcag gaagacttcc agaaaatccg 480  
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 cattgaaata gacagtgatg aagagcccag gggatgaatta ctttctcttc gggacattga 600  
 acgccttcat aaaaagccaa agtctgacaa agagacagga ctagcaactg caatggcttg 660  
 aaagacagac cgaaaagaat ttgtgaggaa gaaaaccaa acaaattccat ttccagttc 720  
 gacaaataan gagaagaaaa aacngaagaa ctttatgatg atgcggnata gcccgaatgt 780  
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<210> 5491

<211> 844

<212> DNA

<213> Homo sapiens

<400> 5491

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cgcagcgcgg cctgggctcc cgcgtgttta aaagtgcgct tgtggctgct gctgtcttaa   60
ctcctgtgct tggcggacag acaggcgaga tggcggcgga ggtgttgccg agtgcgaggt  120
ggcagtattg tggggcgccc gacgggagcc agagagctgt actggtccag ttctccaacg  180
ggaagctaca gagtccaggc aacatgcgct ttaccttgta tgagaacaaa gattccacca  240
accccaggaa gaggaatcaa cggatcctgg cagctgaaac agataggctc tcctatgtgg  300
gaaacaattt tgggactgga gccctcaaat gcaacacttt gtgcaggcac tttgtgggaa  360
ttttgaacaa gacctctggc caaatggaag tatatgatgc tgaattgttc aacatgcagc  420
cactattttc agatgtatca gttgagagtg aactggcgct agagagtcag accaaaactt  480
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gacgtgtata aatttgaaga atcttctttt ccctgcggag tattgaaagc tcttcaaagc  780
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<210> 5492

<211> 828

<212> DNA

<213> Homo sapiens

<400> 5492

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 aacttcacca ctagctttca gtgactcagt tttaaatgtt attaatacaa atgcaaagca 180  
 gttggaaaat aaggagcatc tctggaaaat gtggagtgtt atagtcaccc cattaactga 240  
 attgattaat cagaccaatg aagtaaataca aggtgatgcc ttagaacata attttagtgc 300  
 catctatggt gcattgactt taccagtaaa ccacattttt tcagaacaga gatttccagt 360  
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 aatgtccagt ttggaagatg aaggcttttc taatttgttg ttcgtggata gaattattta 540  
 tattattact gtaatggttg attgcattga cttctcacca tataatatta aatatcagcc 600  
 caaagttaaa tcaccacaga gaccttcaga ttgggtccaaa aagaagaatg agcccctang 660  
 gaaattgact tctttattta aacttattgn gaaagtgatc tattctttnc acacactgag 720  
 ctcaaggga acacattctg atccctcttc actattggca actcaatcac cagcattatt 780  
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<210> 5493

<211> 705

<212> DNA

<213> Homo sapiens

<400> 5493

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gccgcctaca gcctcctgct gttcctgctg cagatcaagg acagacacaa cggcaacatt 540  
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tctcccttac cccggcaccc aggggtggat agggatcccc accccacaga gaggagaatg 660  
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<210> 5494

<211> 772

<212> DNA

<213> Homo sapiens

<400> 5494

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gtttgctatt cctgttttat aacctgttct gcagaaacct atttttatta aagattttta 180  
taagaaaggg aaacctccat gtcttcagct tgttccctgg gccaacggct ctgaggtgac 240  
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caccgtggcc tgctgaaagc acacagtgga cagagctga gtccagagct tcctctgaac 480  
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ttggcttgga gaacccatca cacagcgggg aggcctggga tggttgtct gcggggagca 720  
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<210> 5495

<211> 804

<212> DNA

<213> Homo sapiens

<400> 5495

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<210> 5496

<211> 784

<212> DNA

<213> Homo sapiens

<400> 5496

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 tttaataact atgccaagaa ttctgngaataaatataagtc tttaatatgt atttcctaata 720  
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<210> 5497

<211> 741

<212> DNA

<213> Homo sapiens

<400> 5497

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 ataactgtga ttgatggcca tgcaggagaa atatccaact gaggggatct ctcacgtcac 180  
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 ttctacttta gggacctctc ctgccaagcc aaattctaca cctgttggac cctcttctc 480  
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 agaaaatgga attgagcagt cctggtttcc agcagtgggc catgaaagac aagaagaggc 660  
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 actttattca gatcctnacc a 741

<210> 5498

<211> 811

<212> DNA

<213> Homo sapiens

<400> 5498

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aaaccgaccc ctacgcatct gatccgggaa atatattant ggatgacttc acaatgacct  780
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<210> 5499

<211> 728

<212> DNA

<213> Homo sapiens

<400> 5499

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<210> 5500

<211> 788

<212> DNA

<213> Homo sapiens

<400> 5500

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<210> 5501

<211> 724

<212> DNA

<213> Homo sapiens

<400> 5501

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<210> 5502

<211> 741

<212> DNA

<213> Homo sapiens

<400> 5502

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<210> 5503

<211> 702

<212> DNA

<213> Homo sapiens

<400> 5503

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<210> 5504

<211> 839

<212> DNA

<213> Homo sapiens

<400> 5504

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<210> 5505

<211> 740

<212> DNA

<213> Homo sapiens

<400> 5505

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<210> 5506

<211> 713

<212> DNA

<213> Homo sapiens

<400> 5506

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<210> 5507

<211> 837

<212> DNA

<213> Homo sapiens

<400> 5507

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<210> 5508

<211> 817

<212> DNA

<213> Homo sapiens

<400> 5508

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<210> 5509

<211> 827

<212> DNA

<213> Homo sapiens

<400> 5509

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<211> 750

<212> DNA

<213> Homo sapiens

<400> 5510

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<210> 5511

<211> 821

<212> DNA

<213> Homo sapiens

<400> 5511

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<210> 5512

<211> 753

<212> DNA

<213> Homo sapiens

<400> 5512

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<210> 5513

<211> 612

<212> DNA

<213> Homo sapiens

<400> 5513

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<210> 5514

<211> 759

<212> DNA

<213> Homo sapiens



<400> 5514

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<210> 5515

<211> 792

<212> DNA

<213> Homo sapiens

<400> 5515

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gaattgtagt gactccaatg ggatcaggta gcaatcgacc tcaggaaata gaaattggag 600  
aatctggttt tgctttatta ttccctcaaa ttgaaggaat aaaaatacaa ccctttcatt 660  
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<210> 5516

<211> 827

<212> DNA

<213> Homo sapiens

<400> 5516

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taaggatgaa ttcaggaagg cctgagacca tggaaaactt gcctgctctc tacactat 180  
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atcccaacaa tgttatcatt gagcaagaag agaggcggag gcgacccctc caggattaca 480  
 ctgggcagaa gatcaccctt gaggctgtct tgaacactac ctgcaagaag tgtggctgta 540  
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 ctgatgagga agaggaaaag gaagaggcaa agtcagcaga gtttgagaag cctgacccta 660  
 caaggaatcc ttctagaaaa agaaagaagg agaanaagaa aaagaaacat agagatagga 720  
 agtcacttga ctctgacagc ttcanactct tgagaagtga tacaggccaa naaggcaaag 780  
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<210> 5517

<211> 880

<212> DNA

<213> Homo sapiens

<400> 5517

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 attcaattac acagtggatt gtagacatgg aagggtgcacc aggtacctta tatgaagggg 240  
 aaaaatttca acttctatct aaatttagta gtcgatatcc ttttgactct cctcagggtca 300  
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 ttattagcat gctttccagc tgcaaggaaa agagacgacc accggataat tctttttatg 480  
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 gatgccactg ttatcatcct cctagcagaa gatagtccta ctgagaaaat gagcactttg 600  
 atcattcagt ctttgaactt taacctttga ctggaagtga cctataggca atgaagacta 660  
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 caggcaactg acatgctttt attagncata cagtattaat gcagggtgtca ngaaatgtca 780  
 aatataattc catttttaat ttatttttt taagcttttg ggaaaactcc aggtcctcat 840  
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<210> 5518

<211> 581

<212> DNA

<213> Homo sapiens

<400> 5518

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catatggggg ttctggagag cggggtgtgg gccctcccag gcccaatact tcaaagcatc  180
ctacctctgc tcaatatata ttacttgag aggattgagg aaactgccct caagaaaggc  240
ctctcaactc aggccatctg gcgccgactc tgggatgaac tgatgaagac aaggccttcc  300
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tctacgtggg accattgatg tgtcttctga caggcgtctt tgtgatcagc ggttctcacc  420
tcttctgcac agctcccgcc atgtccgaca gtcaccatc tgtaacatgc tgcagggtgc  480
aaccgagctg gtggctgagc ccaaccgcag ggttctggag accctgccag ntncctgcac  540
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<210> 5519

<211> 812

<212> DNA

<213> Homo sapiens

<400> 5519

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tctctcgtgc aatggcgctc gggctggtaa gattgctgca gcagggacat cgctgcctcc   60
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ccgccttccg cttccagaag gagttagagc ggcagcgctt tctgcggtgc ccgccgccgc  180
ccgtgcgccg ttcagagaag ccgaactggg attaccatgc agaaatacaa gcttttggac  240
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atattaaaag tgaggaggcc aaacgccaac aacttgggat agagaaagaa gctgttcttc 360  
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 ttacacagtt tcttgaagac gagtaccag acatgcccac tgaaggcata aaaaatcttg 480  
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 acttcttaat tactcaaatg actggaaaag actctttgag atgcggaaga taataaatcc 720  
 catggggcta ttggtagaag aactgaanaa aaggaatggt tcaacttctg gaatcaagga 780  
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<210> 5520

<211> 724

<212> DNA

<213> Homo sapiens

<400> 5520

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 tacagcgaca acagcctgga ccccgggctt tttgtagaaa gcacccgcaa ggggagtgta 180  
 gtgtccagag ctaatagcat cggttccacc agtgcctctt ctgtcccaa cacagatgat 240  
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 gcacacactc aggtgagca gaagaggagg gacgcatca agagaggcta tgatgacctt 360  
 cagaccatcg tccccacttg ccagcagcag gacttctcca ttggctccca aaagctcagc 420  
 aaagccatcg ttctacaaaa gaccattgac tacattcagt ttttgacaa ggagaagaaa 480  
 aagcaggagg aggaggtgtc cacgttacgc aaggatgtca ccgccctaaa gatcatgaaa 540  
 gtgaactatg agcagattgt gaaggcacac caggacaacc cccatgaagg ggaggaccag 600  
 gtctctgacc aggtcaagtt caacgtgttt caaggcatca tggattccct gttccagtcc 660  
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<210> 5521

<211> 670

<212> DNA

<213> Homo sapiens

<400> 5521

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gaagccctgg caggtcagtg gcaggcactg tcacgctgag tcctatgctg gcagcgggga    60
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cacaggttcg cgggtccgagt cactgcaccg agactccaag gcctgcagca gaaacagttt   180
aataggggga gaggagagaa gaccccagtt ccgcctccat gagaggtttg gggatggggg   240
tgtttagggg tctggacagg ggcggctgaa gtgtggggtc gctggttggt ggggaagtga   300
caggcgaatc ctgggacggg aggtgaagaa accgcattct cctgctgagt gggttcctc    360
gtggggtttt caccctgctt ggcgccagcc tttccgttgg aattcaagat ctgagaaaga   420
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angtttccat tccttgggga cacacggctg gtcagccagt tgaatgattg tatttggggg   600
agaagacaga agtgatctct tccttnectga ctcnagact aatgaagaga gaaaacaata   660
tgattcanta                                     670
    
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<210> 5522

<211> 849

<212> DNA

<213> Homo sapiens

<400> 5522

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aacagtgggtt ttgcatatag atggccttga tgatacgtct cggagaaatc tatgtgaaga   120
ggctttgtta aaaattaaag gtgttattag ctttactttt caaatggctg ttcaaagggt   180
    
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tgtggtgcga atccgttcag atttgaaagc tgaggctttg gcatcagcaa tagcatcaac 240  
 caaggttatg aaagctcagc aagttgtgaa aagtgaaggt ggagaagaga tgttggtccc 300  
 attccaagat actcctgtgg aagttgaaca gaacacagag ctacctgact acctgcctga 360  
 ggatgagagt cccacaaagg aacaggacaa agcgggtgtcc cgggtcggct cacacccaga 420  
 aggtggagct agctggctta gcacagctgc aaacttttta tccagatcat tttattgggtg 480  
 acttcacttt tgggctcaag gactgtgtga accaacaagg ggccagtttt ccattgttgt 540  
 ggtgaactgt caagtgcaat ttgcaataag ttatcatgaa aagtttttag attacacgat 600  
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 agaggctaca gatggagttg ctttggttat gaaagtattt tggnttggtt tctttcattt 720  
 aattgctcat atttaaaaac catgggtcca ctggtaaaac cncatgtgta tgtgcacttt 780  
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<210> 5523

<211> 845

<212> DNA

<213> Homo sapiens

<400> 5523

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 tgggaaaaga taaatatgaa aatgaagatc tgatcaagca tggctggcct gaagatatct 180  
 ggtttcatgt ggacaaactc tcttcggctc atgtatacct tcgattacat aaggagagaga 240  
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 ttgtgacagt ggagaagaaa gtaaatgaga tcctgaaccg attagaaaag accaaagtcg 480  
 agcggttccc agacctagca gcagagaaaag aatgcagaga tcgtgaagag aggaatgaga 540  
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 aagatgtgaa tgtagagaca attgcagacc ttttgggttc atctggggtc tgaagtataa 780  
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<210> 5524

<211> 849

<212> DNA

<213> Homo sapiens

<400> 5524

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 ctgagagtca tgaccctgtt ggctgctgta actgcatgaa ggcacaaaag gaaaagaagt 180  
 ctgagaatga gtggactcag acccggcagg gtgaggggaa ctccacgtac agtgagggaac 240  
 agctgcttgg ggtacaaagg atcaagaaat gcagaaatta ctatgaaatt ctgggagttt 300  
 ctcgagatgc tagtgacgaa gagcttaaga aagcttacag aaaactcgcc ctgaaatttc 360  
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 tgactttcac tgcccctcga gccagacctt ataattatta cagggatattt gaagctgaca 540  
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 atatgttttc aaatgtgaca gatgacactt actattaccg tcgacggcac ccgacatgag 660  
 angacacaga ctcagaagga ggaggaagaa gagaaacctt agactacata ttctgcattt 720  
 attcagctac ttccagttct tgggaatggg attatatctg ncattactca ctgctggctc 780  
 taatcccat atagctggtc tataaatcga ncttgggcta cccatttcta gagaacttan 840  
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<210> 5525

<211> 756

<212> DNA

<213> Homo sapiens

<400> 5525

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agctgtccgc gaaacctagt gctgaagcag gcgcggacgt gcccgggtgcc tggcgcgtgg 60
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gggcggccag ctgaagaacc tcactggggg cctgggaggc ggcgaggata agggagatgg 180
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cgaggaggac acagaggagg aggaggagaa ggcctcagtc cttgggcagc tggccagcct 480
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gccccatga gggctaagag tgtgtcaact tncagggacc catactccat ttggggcttt 660
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<210> 5526

<211> 804

<212> DNA

<213> Homo sapiens

<400> 5526

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tcaagatcag tctcaggtgc cacgtgtgcc aacgcataca cttgcatgg ttgtacctcc 180
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tgtgagtacc agagtgccca ctggttccaa cagttcttct cagaccacag agtgtcttac 300  
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 ggctcgaggt gcaaataaag aacataggaa cgtatctgat tgtcaccact gagtctanct 720  
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<210> 5527

<211> 743

<212> DNA

<213> Homo sapiens

<400> 5527

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 cactcgggcg ctcagggggt actggcagcg cagaaggctc gaggtctgtt caaggacttc 180  
 ttcccggaga cggggacgaa aatagagctc ccagagctct tcgaccgtgg cacggcgagt 240  
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 gcggctaate accagcagct tttcactgat gggcgctcct ggggcagctt cactgtgctg 540  
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 cacttccgca tggggacgct gctgagcccg gcagaagcgt gcaacttgcg gctcaagagc 660  
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743

<210> 5528

<211> 755

<212> DNA

<213> Homo sapiens

<400> 5528

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cgctccggct ccgagcagtg gtctcgaaa gagggtcgtg gtcccgcacg gatgcgcttg 180  
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ttgtacgagg aggccgcgcg ttactatcaa gcttncaagc cccattgggt gcgcnaacct 720  
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<210> 5529

<211> 799

<212> DNA

<213> Homo sapiens

<400> 5529

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 cggacctacc gagagtattt cggggagaag acagagttcc agcttctaaa atatttgctn 720  
 ctaaaatctt gaccacctga ctttccgat tgggatgccg ntctgtgcgc cttaaatact 780  
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<210> 5530

<211> 810

<212> DNA

<213> Homo sapiens

<400> 5530

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 aagtaatcag ttaaattgatt acttgcttat aaatatctaa actagtccag ttatgaaatc 240  
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 aaaataaaac ttaaatacat tacacgggtt gtaaggacaa aggattttta aatctgagca 540

cttaggtgaa gggacaagca ggtttatgtg tttaaacaga aagaaggga aaggtctatg 600  
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 tcataattaa gcccgtatac cccggattaa aattaaccgg aagcatttca cataaatggt 720  
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<210> 5531

<211> 696

<212> DNA

<213> Homo sapiens

<400> 5531

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 catgactttt atcgggacgc cgttgtggaa gcctcacgca ggagccctgc ccccggtggag 180  
 aagatcccac tggtagactcc aaccctacca ccatgaatgg ggtcctgac ccccatagc 240  
 ccatcgcagt ggacttctgg agcctgcgcc gggctggcac cgcacgtctc ttcttcttgt 300  
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<210> 5532

<211> 820

<212> DNA

<213> Homo sapiens

<400> 5532

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 cacctgaaga tgtaatttgt gaaagaagca aaaataaatc tgtggaactg aaggagcgga 180  
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<210> 5533

<211> 711

<212> DNA

<213> Homo sapiens

<400> 5533

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<210> 5534

<211> 746

<212> DNA

<213> Homo sapiens

<400> 5534

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 ccaggcacgc cacgccagct cgggggtgaa gctggaagtg aacgagagga tcctcaactc 180  
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 gatttctccg gcctgtccct catcaagctg aagaagcagg agatggagac gcangtgcgt 660  
 gtcctggact ggagaagacg ctggaagctg aacgcatgcn gntgggggaa ttgccggaac 720  
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<210> 5535

<211> 776

<212> DNA

<213> Homo sapiens

<400> 5535

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ctcaccctc ttcgccgcca cgtccgcgaa ggcctcaagc gcgaggccag gcgaggcccc 120  
gaggcgccca ccacttcacg acaccggagc gaaccgggagc ccagaggctg cgacccccct 180  
gccccgaatc ctgccggtgg gagtggctgc atttgaacca aacggccttc gcgggcagca 240  
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gaatcgaaaa gtcggcacag aaagtcttaa tcaagtatgg gaatgaaccc ctgcggtcct 660  
tgtccgagtc tgaggatcag tcctttaacg ttggcttatg agctggnttt aatgcccttg 720  
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<210> 5536

<211> 774

<212> DNA

<213> Homo sapiens

<400> 5536

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tgaagaaacc gacgcccatt ggcgaaaggg acctgctcaa gttcactcaa gaccacagag 180  
ctgggcagca agaaggagct caagtccatg cccttcatca cctacctctc aggtttgctg 240  
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 agtactgtgg tctccttgga gtgggtggat gtccagccag ctattgggac caaggtctnc 660  
 gactatattc tgcagcataa gaaagtggat gaatcacnga cacttgacct gtacacagga 720  
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<210> 5537

<211> 854

<212> DNA

<213> Homo sapiens

<400> 5537

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 aggtggcgac agtgctatga gggccttcca gaacacggca actgcatgtg caccagtatc 180  
 acattatcga gctgttgaaa gtgtggattc aagtgaagaa agtttttctg attcagatga 240  
 tgatagctgt ctttggaac gcaaacgaca gaaatgtttt aaccctcctc ccaaaccaga 300  
 gccttttcag tttggccaga gcagtcagaa accacctgtt gctggaggaa agaagattaa 360  
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 ttcaggttac aggaaccaa gaaagacctg atagcccag tagtgaggat tattgtacca 780  
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ggantcgaag anac

854

<210> 5538

<211> 774

<212> DNA

<213> Homo sapiens

<400> 5538

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ggtgtgccga agctctggtc agtgccatga tccggcagga gcgctccaca tcctaccagg 180  
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ggccccggaa gtgaaaaagc ggactgtctt ctcagttcgc tgacaaagta tgagacttna 720  
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<210> 5539

<211> 826

<212> DNA

<213> Homo sapiens

<400> 5539

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gcgcttgcca caaccctgcg ggctctccga tgcggcgagc gagctgggga gggggcttct 120  
 ccgcggccca aaagcctgtt catctagccc catgatggct gtggacatcg agtacagata 180  
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 cacgttcttc ttngacatca gtttgcccga aaagattcag tcttatgaaa gaatggaatt 780  
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<210> 5540

<211> 816

<212> DNA

<213> Homo sapiens

<400> 5540

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 ggaaagctgc tgctgatggc attgtttttg tggcagcaag ctgaatgaca gatcctcact 180  
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 ccctatatca ttaggaattt tccattacc tgctggagat ggattgctta cacctgatgc 480  
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acgttctcat accagcctga aggatgagct ttctgatgtt agccaaggcg gatctaaagc 600  
taccactcca gcatcaacag ctaattcaga tgtggcaaca attcctactg atactccctt 660  
aaaggaagaa aaccaaggat ttgtgaangt tacagatgcc ccaaataaat cagagataac 720  
aaacacattg aaatacaggt agcccangaa actagaaatg natctactgg gctcttgctg 780  
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<210> 5541

<211> 850

<212> DNA

<213> Homo sapiens

<400> 5541

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acagaagcag ggagtctcat ggttgtcctg aggtgactgt aatcaatgag agactgaaga 180  
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ctaaggagga ttgtccttta tataatgggn ggaaatataa tcttggata tctcaatgat 780  
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<210> 5542

<211> 727

<212> DNA

<213> Homo sapiens

<400> 5542

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ccaggaatgg gttatgaatc aagccaaggt gccggtggat ggtaataagg aagagcccca  660
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<210> 5543

<211> 795

<212> DNA

<213> Homo sapiens

<400> 5543

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ccgaaaagca cttgccttg tcctgggatc tcgaactctg agagctctcc gacgctgaat  180
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<210> 5544

<211> 783

<212> DNA

<213> Homo sapiens

<400> 5544

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<210> 5545

<211> 765

<212> DNA

<213> Homo sapiens

<400> 5545

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<210> 5546

<211> 811

<212> DNA

<213> Homo sapiens

<400> 5546

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<210> 5547

<211> 810

<212> DNA

<213> Homo sapiens

<400> 5547

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<210> 5548

<211> 500

<212> DNA

<213> Homo sapiens

<400> 5548

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<210> 5549

<211> 522

<212> DNA

<213> Homo sapiens

<400> 5549

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<210> 5550

<211> 545

<212> DNA

<213> Homo sapiens

<400> 5550

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<210> 5551

<211> 543

<212> DNA

<213> Homo sapiens

<400> 5551

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<210> 5552

<211> 502

<212> DNA

<213> Homo sapiens

<400> 5552

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aattgacttc acatgtgtga gaagctagga tagggaagaa ggagtaaata agaaatgtcc  420
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<210> 5553

<211> 463

<212> DNA

<213> Homo sapiens

<400> 5553

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 ctgggactac aggcattgcac caccacgccc ggctaatttt tgtattttta gacgagacag 180  
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<210> 5554

<211> 538

<212> DNA

<213> Homo sapiens

<400> 5554

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 gacttctaga ttaaaattaa gcatgggctc aacagttcta aagngaaaac atgcatagn 360

ganatccctg ccttcttctc tectctcttc ctttcctttc tttctttnnn ttttttttct 420  
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<210> 5555

<211> 512

<212> DNA

<213> Homo sapiens

<400> 5555

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agggaaggt ccgacaagtt ctnggcacaa tgcttcagga agtcaaaagt cagggcccgg 420  
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<210> 5556

<211> 514

<212> DNA

<213> Homo sapiens

<400> 5556

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cttttactta atacatacgc ctttggaat taattatctg acatttatac aagcatcaaa 180

atttccaaat cactgagtag tgagcacttc agttctttat tgtctatacc caaatttgaa 240  
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<210> 5557

<211> 484

<212> DNA

<213> Homo sapiens

<400> 5557

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 tacaggcgcc tgccaccaca ctgagctaatt ttttgttatt tttagtagag acggggggttt 180  
 cactatgtta gccacactgg tcttgaactc ctgacctcaa gtgatccgcc cgcctcagcc 240  
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 cttgtcacta tataggtgta tgacctcgac caagtcactt ttcctaactc acaagatgtc 360  
 tgagattaat gacgtaacgt caaacattcc tcttggtctt aatttcctac ctnttccann 420  
 tgcttgnata agggagccca atgnettaaa agccaatgtg agcccctggg tttgggaacn 480  
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<210> 5558

<211> 468

<212> DNA

<213> Homo sapiens

<400> 5558



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agaacctttc catatttgcc aaagagggtt ttcaaatacag cagctttggt attagatgaa 360  
agtccactaa cccagatatt tttagttgag ctccactgc taccactagt actacttgta 420  
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<210> 5559

<211> 466

<212> DNA

<213> Homo sapiens

<400> 5559

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gcccagagtg ggatttccca tggaagcggc agtgtataga ggtatactat tctcagccat 360  
tgaagcctgt aaagctgcat tganagggtg gcagtangcg tggctgctct gcatgttttt 420  
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<210> 5560

<211> 417

<212> DNA

<213> Homo sapiens

<400> 5560

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cccactatgc ttcagggtct cctggctcac actaggcagc tcttgagga tcttcagcag 180  
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cataactaca gcaggcagta aagttaattt tttcagtgtt ggcttttttt gattgntcaa 360  
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<210> 5561

<211> 461

<212> DNA

<213> Homo sapiens

<400> 5561

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aactgcatga cattgaaaat gcgtattaca cttacagtgt ctagactttc ctatgtgtgc 180  
tcagatacaa ttagtgaagc aaaagtatac atataccccc tactgntact cagttgctac 240  
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gccctactta gcagcacagt ttaagtaaac acaaaaactg tggttgagat gcttgncttt 360  
ccaaagatgt aaacatcagt ccagtggtg taaactttgc tgnatcgaat gagaccnaag 420  
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<210> 5562

<211> 438

<212> DNA

<213> Homo sapiens

<400> 5562

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aaacagaaaa ctacactccc aggaggccaa cttcttccag ccaagaaaag gacaggagaa 360  
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<210> 5563

<211> 548

<212> DNA

<213> Homo sapiens

<400> 5563

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<210> 5564

<211> 153

<212> DNA

<213> Homo sapiens

<400> 5564

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gggaggggta gggaggggtnt tgnnntantn ntg 153
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<210> 5565

<211> 539

<212> DNA

<213> Homo sapiens

<400> 5565

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<210> 5566

<211> 546

<212> DNA

<213> Homo sapiens

<400> 5566

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<210> 5567

<211> 535

<212> DNA

<213> Homo sapiens

<400> 5567

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<210> 5568

<211> 534

<212> DNA

<213> Homo sapiens

<400> 5568

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<210> 5569

<211> 542

<212> DNA

<213> Homo sapiens

<400> 5569

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<210> 5570

<211> 515

<212> DNA

<213> Homo sapiens

<400> 5570

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<210> 5571

<211> 541

<212> DNA

<213> Homo sapiens

<400> 5571

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tacaaatgaa ataacttcaa atttaagggg ctgtcagaaa aatggaattt cacaactaat 300  
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tcatgtcttc tacaagttgc ctctgctctg ctctgatca cagaaaggaa gtcccaagtg 480  
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<210> 5572

<211> 550

<212> DNA

<213> Homo sapiens

<400> 5572

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aaacttttca ttttagaaaa tgtaagcat gaacacaaaa agactagata acagtgttat 240  
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gaattacttc atttttatag agtttagagc ataaactaac aagggaatct aggctcttta 420  
tagtaaatat ctaaaagcat tttattttac agaattgaca gcgtatgcca tggctattca 480  
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<210> 5573

<211> 549

<212> DNA

<213> Homo sapiens



<400> 5573

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 gacttccttg tctacaattc cttctccat taagtgaggc taaagctttg cttttggnga 480  
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<210> 5574

<211> 553

<212> DNA

<213> Homo sapiens

<400> 5574

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 ctgggatatg ctaagttttt ctttttcttt ttctaaatca agtagtgcta ctgaaatcca 360  
 gtgcctaata gagcagatgg tggagggtctt agactctgga acatttatag tgatgcttct 420  
 gaatgcaaaa caccaagagt ggatttcaca ggctgtgaat ctgatttgat tttgatggga 480  
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<210> 5575

<211> 540

<212> DNA

<213> Homo sapiens

<400> 5575

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gggactacag gcacctgcca ccatgccagg ctaatTTTTT ttgtatTTTT agtagagaca 180
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aagatagaga tgggtgttttc ctaaggagta aacattgggt ttgngtacta tccaatcaat 480
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<210> 5576

<211> 553

<212> DNA

<213> Homo sapiens

<400> 5576

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gtaatcttga ttgtcaaagg ccaaggataa taacagtga tatgtactga gagctacca 180
tgtgccaggc acattcagag caagctacat aaattaacac acttaattct ccaaacacct 240
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ttaagtaact tgcccgagat cacaagttag taagtagggg acagggattt gagcccaagc 360
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atgactgaat ccctacttna gntcctttgc ctancnacct gagatgccca tgggggctga 540  
aacctgccat nac 553

<210> 5577

<211> 531

<212> DNA

<213> Homo sapiens

<400> 5577

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attaagaaaa aagccccata atagactaat agctaaagt ctctctcttt tactttcagg 180  
caattagctt gatgaaatgg cctctttttg tgtacctgg aagtgtaaac cgatatcata 240  
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aaatgtctac tgcaggggag gaaaacgaat nccctaagtt gggggagagc atgatgctga 480  
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<210> 5578

<211> 553

<212> DNA

<213> Homo sapiens

<400> 5578

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agcactggtg atgcttgggg aagtcagtgg agcagctgct gcacaggcca gaggggcact 180

ggctcgactg atactgatgg cagcagtgtg cgtggctgag cctggcatca gaggcgcagg 240  
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 ccttagcctg aggacttgct tggatgtgag ctgctgatac cacagctgcg gggacaacac 480  
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<210> 5579

<211> 548

<212> DNA

<213> Homo sapiens

<400> 5579

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 tgcagcttaa cttcaaagtc aatcctgggt cttttgacac aagattcgat catgtcactt 180  
 gccatcaact tcagccgttg ttccaggtgc tttccaaact cttcttcagg ccagtgcagg 240  
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 ttgtgaaatt ttccattgca caaattatag tcagtacgga gaaaatcatt cagcagctga 480  
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<210> 5580

<211> 555

<212> DNA

<213> Homo sapiens

<400> 5580

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 actgtaggaa ctgctgaacg tcagataaat gtttcttcag aacaagagat attagttcct 180  
 aaaagattct tctaaagttt ttttaaaaga gattaagaaa aacagtaagc cactgggtta 240  
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 taaacttagt ttcctgtctc ataaaactca gaagacgcca gtgatgtcta aactatggaa 360  
 aagaataaaa gcctcttttt catatgaaaa aacattcaaa ctaaactctac cttaacatta 420  
 ttttctatga aaacttaata aagaatggct cttctgaaaa caaatgcta tacaatcag 480  
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<210> 5581

<211> 568

<212> DNA

<213> Homo sapiens

<400> 5581

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 tagtaaagag ggactcactt gcacaggctg aggtacacgt gacactttcc ttttccgtgg 180  
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 gagttgactg ctgtgaatgg gtttccagac ttggataaaa tgcttggtgg agattcccca 480  
 tcttctatgg aaagcaaaca cttttcactt tcaggacaat gttttggacc tggncattta 540  
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<210> 5582

<211> 570

<212> DNA

<213> Homo sapiens

<400> 5582

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cactgaaata taatatgcaa ctaacaaaga tccaaaataa atgaagcaaa aattgataga 180
actaaaagag atatggaaaa atccacagtc ataactggga gactcaataa gtccattctc 240
aatgactgat aaacaaatag atggaaatca aaaaggatat atcaaacctg gataacgtta 300
tcaactgggt taatataatg gacatttaca aaaaacactc tacccaagaa caacagaata 360
catattcttt ccaagtgcc acagaacata taccagata gatcatattc tgggtcataa 420
aataaactaa caatttttaa taaaaccaca taaagcatgt tctctggcta taccaaaatt 480
aaacnaggaa ttaaataatn gaaaactccc ccaggctaac caacatgggt gaaaaccccn 540
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<210> 5583

<211> 569

<212> DNA

<213> Homo sapiens

<400> 5583

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ccacgcccgg ctaatttttg tatttttagt agagacaggg ttccaccatg ttggccaggc 180
tggtctcgag ctctgacctc aggtgatctg cctgccttgg cctcccaaac tgctgggatt 240
acaggtatga gccactgtgc cctgccttga ctcatTTTTG agaaagggtc tagcaaacac 300

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cagtctcagt aaccatcagg cactggcggg tcttttaatg tgaagtttgc tgaaagtgtg 360  
gccttttgaa gggctggagg ctccttccca ggcagcagcg tcccttcact gaacctcttc 420  
ttccacangc tcttctgaga atttccttcc aagcctgaaa ggctcttttg gggcattggg 480  
gtaagtgata cttnatnacc cttggccttt tgaccnggtc cattccccaa aacctgtgat 540  
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<210> 5584

<211> 551

<212> DNA

<213> Homo sapiens

<400> 5584

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ttggaggaac gacttttaaaa tgtaaaatga gaaatgggca ctgaacactc catcctcact 180  
cccaacagcc caccacacac acctcttcaa ctgctatcca aacatggagg agctctttgtg 240  
gaagagaggc tcaacaccaa ataattgagc ataagacatt caagactaaa ggaaccccag 300  
acagatgttt aggaagtagg gttgaaaata tcaccatctc ccaacagctg aagttgggac 360  
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taagggcgag atcaacctat cttcatagcc ataagcaatn cactnacacc tgggcattaa 480  
acaggctttt ccttttcttt ttttttttg agatggagnc ntngccttgt gggcccangc 540  
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<210> 5585

<211> 562

<212> DNA

<213> Homo sapiens

<400> 5585

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 taatgctttc cctccccgc cccacaaca ggccccggtg tgtgatattc cccctcctgt 180  
 gccaagtgt tctcattgtt caattcctat gagtgagaac atgcagtgtt tggttttttg 240  
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 catgaactca tcctttgtta tggctgcata gtagtccatg gtgtatatgt gccacatttt 360  
 cttaatccaa tctatcattg atggacattt gggttggttc caagtcttg ctattgggaa 420  
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<210> 5586

<211> 562

<212> DNA

<213> Homo sapiens

<400> 5586

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 agttatagca cttactttct tttagcatg aatngagaag aaaaggacag aagtntagca 480  
 aagaaattaa aaatctctta gtattaagag gtctaaaaaa atctagattt tagcaaggga 540  
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<210> 5587



<211> 359

<212> DNA

<213> Homo sapiens

<400> 5587

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tcggactcct gccacctcca agtcctttct tttccttctt gccctccctc tcttccctaa 300  
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<210> 5588

<211> 414

<212> DNA

<213> Homo sapiens

<400> 5588

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caggcaccca ccaccatgcc tgcctaattt ttggattttt agtagagatg gggtttcgcc 180  
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aaagggtgg gattacaggt gtgagccact gggcccgcc aaaggttacc tttattgata 300  
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<210> 5589

<211> 538

<212> DNA

<213> Homo sapiens

<400> 5589

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<210> 5590

<211> 580

<212> DNA

<213> Homo sapiens

<400> 5590

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accaaagnta taaaagttgc aagcanaggt cccactggca atggancccc ggaaagggat  540
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<210> 5591

<211> 565

<212> DNA

<213> Homo sapiens

<400> 5591

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taatatttat ttcacctca agcttggttt gaaatttctg tccttacgta tgcttcataa  180
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ttaaagtga aattctgaat caataancag gaaggtgggc cctganatcg gcccaacttc  480
cagaagataa aaagctgctg gttccangcc acacttccga gggccaagac cttaacntn  540
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<210> 5592

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5592

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tgcagagcaa ttttagattg atatatgccc atttgtccat ttttgcttc attaccagtg  180
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gttgattttt atatggtgaa agatagaggc ctagttttat tttctgcata tgaatatcca 360  
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<210> 5593

<211> 557

<212> DNA

<213> Homo sapiens

<400> 5593

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<210> 5594

<211> 566

<212> DNA

<213> Homo sapiens

<400> 5594

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<210> 5595

<211> 493

<212> DNA

<213> Homo sapiens

<400> 5595

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 agctgtatta gaggggaatac acattttaat tgctcttttt gaaaatatca ccaggcagtt 420  
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 annnnnnaan ccc 493

<210> 5596

<211> 564

<212> DNA

<213> Homo sapiens

<400> 5596

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ccatgctggg gtgctgcacc cattaactcg tcatttagca ttaggtatat ctccctaatgc   180
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gacatgaact catccttggt aatggctgca tagnattcca tgggggatat gtgcccaatt   420
tcttaatcca gtctatcatt ggtggacatg tgggttggtt ccaagtcttt tgctattggg   480
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<210> 5597

<211> 556

<212> DNA

<213> Homo sapiens

<400> 5597

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ataacaaatt attaaatcaa ccatttttcc ggtttataaa aggtcactga ggtcacacac   180
agtgtgtata aatgcagata aggctggtta tacatattta cagtagatac aaattaatct   240
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caggatttcc catgctcgag ttgtttattg ctttttggt cactgattta atattcactt   360
ctgggttggt tacacatatg aattactaat gttcttatct ctttggctaa tgcaaatgtg   420
atagagtga tgaagaaaa agatgaacta attaaatatt cagtcttggc tgggtggata   480

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cttgagcttg cattan 556

<210> 5598

<211> 570

<212> DNA

<213> Homo sapiens

<400> 5598

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cccctcctca ctccctcccc ccttggttgc aagctcagcc aaggatgctc tagggagctg 240  
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atacctggct ggcaactgnga ctagcaaaag gcttggactg ggaatcagaa aggcaacacc 480  
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<210> 5599

<211> 549

<212> DNA

<213> Homo sapiens

<400> 5599

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 aaggtttgaa gtggaagcct gatgagagtt tcaagttcac cccagagata gcccttccag 360  
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 tcaccgctct gtaccgctgg tagctgtttt gggtcctaaa ctacagggga gttgagngg 480  
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<210> 5600

<211> 225

<212> DNA

<213> Homo sapiens

<400> 5600

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 ttggaactgt acaatttctt aagcatatct gaatgcaaaa ggaagaataa cgttattaga 180  
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<210> 5601

<211> 557

<212> DNA

<213> Homo sapiens

<400> 5601

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 ccaaacacag catgtgaaac agttgggcac ggtggttaaag ggcacagact ctggagccac 180  
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cagaagagcg gtatctgggg gatcaggata tctaaattct agacttacag cctggccctg 300  
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gacttgtaaa cttgagaggg ttgaggtcca aggtccctta aatgtaaact ttaaaatgct 420  
tttttgggaa tctttcaaat cttcaagctc ttcaaagtgc aacccggact ttctccttac 480  
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cctaaattta nttttcn 557

<210> 5602

<211> 531

<212> DNA

<213> Homo sapiens

<400> 5602

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ctttagtctt ttcaattagc tatagataac agttctgaaa tgtgtccatg tgtgcacact 180  
tcccactgnc ttaccacttg tctgcttggt gtgtcttgca gattatcagg ctacagtgat 240  
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agactcagtg acatggccag gttcaaaaac tgtgtttttt tttttttttt aaganttttc 360  
ccaagctatt aaacatgtac ctttcagtat gttctacaac aatatagggc tcaaatacaag 420  
ggcagggcat taaggcctac tttcctttct tncatgagaa gagcctaaat ctttagncct 480  
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<210> 5603

<211> 535

<212> DNA

<213> Homo sapiens

<400> 5603

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 agcagctggg acaacaggcg gctaccacca cgcctggcta attttttttt tttttttttt 180  
 ttttttttga gacggagttt ggctcctgtc acccaggctg gagtgcaatg gcatgatctc 240  
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 ttggtctccc aaagtactgg gattacaggc gtgagccccc atgcancctg gcctnagggn 480  
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<210> 5604

<211> 516

<212> DNA

<213> Homo sapiens

<400> 5604

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 ggagctctca tcctccaacc ccagctgccc ccgatcacat acagcttggt gaggagggtt 180  
 gccatgccgt gccaggcgcg ccgcacaggc ccgtcagcca gtgtgtgcca agtggtgctg 240  
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 acgtatgccc aggagttggt ggcagggtcg tagcgtcca cagcattcag gtcattgtgg 420  
 tagtcacggn ccgccacaac gtanatgtac ctgcctacaa cacacacgga caaggtcngg 480  
 cgtgctcctg ctgnanggac tggatcttgg ancna 516

<210> 5605

<211> 552

<212> DNA

<213> Homo sapiens

<400> 5605

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 acaagggagg gacagcacag ggcacaagat ctttgagggtg ttagaagaca ggctgacaga 180  
 ccaagcttgg tgactggctt aataagtctc ctaccacttg aaattctgtg ttattttattt 240  
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 tagggttcgc caatggactc cattatgtag tcgacctgtg ctctcacta ggccctgatt 420  
 tcgctatctg ataacaaagg cttctgaact cttattcttt tcctcactaa caaacctcaa 480  
 taatctacac ttagcattna gggcttccat tcanggggtat tggaaaaact agcttnctta 540  
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<210> 5606

<211> 546

<212> DNA

<213> Homo sapiens

<400> 5606

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 tgtaagatag ngtttttagta tttcagccac ctttaggcac aactcagcca ggcctaggaa 180  
 gcaacccaac gtcattgcca tgaaccattt acacaagtca caccaaaatc aactgacaca 240  
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 tctggcccat aaactcaacc tgtttttgan gggtaggggg attttccatc ttngncntaa 480  
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546

<210> 5607

<211> 547

<212> DNA

<213> Homo sapiens

<400> 5607

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gatattcatt cccaagaata tagttttgga aaagaatggtt actaaatgca ctatTTTTTgg 180
ctatatctat gtatagaatt taaagacatg ccttgattgc tcttatgggg gcagtgaata 240
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taatcattct tcataactat taactacat tgaaccaatc catctattaa gacaccagng 480
gatggtggct ttttttttta acccaattaa aagaaaaaat tgcttgctcg ggctttaaaa 540
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<210> 5608

<211> 510

<212> DNA

<213> Homo sapiens

<400> 5608

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gtataaactg atcactactt gtttgcaatg ggaagaaaga tttacagaaa aaaaaaaaaa 180
agcattgatg tatcttcagt ggagaatggt tagccagcat gtagtttgtc tagtccagca 240

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 ccaaattctt cgctgtgttc tgaactcttg ctccctgctt ccgcatcaca tctgtagcct 420  
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<210> 5609

<211> 544

<212> DNA

<213> Homo sapiens

<400> 5609

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<210> 5610

<211> 583

<212> DNA

<213> Homo sapiens

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 acagcagtca caaggaggtc catgcnctan atcctttcaa acattctgga ggaggaaagc 540  
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<210> 5611

<211> 576

<212> DNA

<213> Homo sapiens

<400> 5611

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<210> 5612

<211> 573

<212> DNA

<213> Homo sapiens

<400> 5612

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<210> 5613

<211> 560

<212> DNA

<213> Homo sapiens

<400> 5613

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ccccctgttc atgacattta cagagcacgg nancagaagc cggnttcngt agggttttta 480  
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<210> 5614

<211> 584

<212> DNA

<213> Homo sapiens

<400> 5614

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taataactta aatgtgtaca gtgcttttaa acttttaaac cccttcacat ctatgaacta 480  
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<210> 5615

<211> 586

<212> DNA

<213> Homo sapiens

<400> 5615

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gataaattca ttcattctctt ttgtaaccct ttctgtttgc tgcttttctt cttccatctg 180  
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<210> 5616

<211> 551

<212> DNA

<213> Homo sapiens

<400> 5616

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<210> 5617

<211> 585

<212> DNA

<213> Homo sapiens

<400> 5617

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atcttcagaa ttcaagacng atngttttat ttggccata tctgcatct ggnetctcct 540
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<210> 5618

<211> 584

<212> DNA

<213> Homo sapiens

<400> 5618

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caggcgcccc ccaccatgcc ttgctaattt ttgtatattt tagtagagac aggatttcac 180
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tggtgcacat gctcantagg ggcaagtct cactgggtcca gcgctccana ggaagtcata 480
taccagttaa atttcacat ctggcccttt actggacatg cttnaaacce tattggggga 540

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584

<210> 5619

<211> 580

<212> DNA

<213> Homo sapiens

<400> 5619

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 acacatgaac atccaacagt ttgataatac aagttttatg gtacaatata atgtttctga 180  
 ataataatac ttaacaatga aagtttcgtg caaagagtaa aacatgttcc ctttttgtgc 240  
 cacaaaatca attctccttg agagactgta cttgcactaa ctgctgtgtt gggtcattgt 300  
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 atactgtaaa gcagactgga caccttgaag ggcctcccat cccttcaac tggctctatc 480  
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<210> 5620

<211> 559

<212> DNA

<213> Homo sapiens

<400> 5620

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 tgacaatttc agagtatcac ttggattttt aaagctttat ttcaatcagt atacactgat 180  
 acatatcctt tatttctgct ttgcttagag aataaatgcc taaggtaaaa gattattatc 240

aaatgttgaa tttttcccat gcccttggtg atagttatta aatcatcaat aagtttatgg 300  
 attatagtta caaatagcag gcttttacac acctgagtat atgatgtaag cgccatgatt 360  
 tcataaaaat aaaaattata aaatgagaca aaatgtttta tttcaaactt atccatgtag 420  
 gtcttatttt tctactgctg ataaaactca gaaaaaaatt atctttattg gaagactaaa 480  
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<210> 5621

<211> 571

<212> DNA

<213> Homo sapiens

<400> 5621

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 aagctattct cctgcctcag cctcctaagt aactgggatt agagggtccat gccaccacgc 120  
 ccagctgttt ttgtattttt agtagatgtg gggtttcacc atgttgccca ggctgggtctt 180  
 gaactcctga cctcaagtga tccacctgcc ttggcctctc aaagggtctg gattacaggc 240  
 atgagccacc atgcccagcc atatgtctta acccagcctc tatcatatga tcctcanaat 300  
 gacagcttcc ttanattttg taccctaatt gccttctctt gctgcagcct agttttggct 360  
 ccagcaattc agtaaaagta gttctactga ggtccagtat catacaatcc agatagctcc 420  
 ttgatggctt tgcttgggtc aaggaaactt tgggctctat ggtaaaatag nggaattcct 480  
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<210> 5622

<211> 581

<212> DNA

<213> Homo sapiens

<400> 5622

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 gccatgggag gatttggaga agctagtga gacggttgct tgcctggggg aattgctgcc 180  
 tcaggagtct ctgaggatcat aaactctgtt tcagatccag aagaagcctg atcggtagta 240  
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 agaaaatcac tttgactgga cagatcttgt tcttttagatg ctacggggct acctggagta 360  
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 tcttgcataa agttacaaag ttccttgaat ctgagtcac agatcctgca gtttttcttt 480  
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<210> 5623

<211> 525

<212> DNA

<213> Homo sapiens

<400> 5623

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 aacttcaggt ttcacaacat gtagcaagta tgatttgttg cacaccaaca gccattcatt 180  
 cctcacgttt tccttgctaa aagagccctg gtcaggcacg gtggctatgc ctgtaatccc 240  
 agcactgtcg gaggtcaggg caggtggatc atctgaggtc aggagttaa gaccagcctg 300  
 gccaacatgg tgaaaccccg tctctactaa aaacacaaaa attagccaga catggtggcg 360  
 ggcacctgta atccccacta ctgaggaggc cgaggcagga gaattgcttg aacctaggag 420  
 gtggagggtta cagtaagccg agatcgtgcc actacactcc atcctgggca agagagcgag 480  
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<210> 5624

<211> 593

<212> DNA

<213> Homo sapiens

<400> 5624

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ttgcctaatt accctggaaa aaagtattct tatgactgaa ctgatgcaaa aatcccttag  180
aaaagcttca tttgtttgcct gtaaagagtc ttcttaaggt cacttttact tctagactgc  240
ccccttgttt ccagtgaag agttttgctt ggtaatggct tgtggttcca cagtgttttg  300
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tgaaaggaag tcccaacact gtaacatttc cccttaatct tcagcaagac acatgaaaaa  420
aaaaaaaaact caagtcccaa ctgaatcttt actttggatc atcactttcc agcggcattc  480
aaaaggctgc tgtgccggtc agaccacaga agctcccttg anggccctg ngggcttatg  540
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<210> 5625

<211> 591

<212> DNA

<213> Homo sapiens

<400> 5625

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acaggagggg attctcccct cagtcactgt agcctcactg tatgatcaag ggaggtgggg  180
attatttagt caaaaaggaa gaaggtagga agaacaggag gtggaaggct ggggaggttg  240
ggacaaacag aaaataaaag gtcattgttg cctgtttgaa tccagaaaaa aatgcctggc  300
cctatggagg ggaaggaagc ccctcagagg ggaggcagtg ggctggaggg aggcagccct  360
gggatgaccc catccccagc accacgggat ctgcggggca gaagaagggg cccaggcang  420

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cgctggttgg aagaacccgc aggggccttc cggagcctnt gggtcacact ggctactggg 480  
gaccttgtgc ccacccttgt gtgttncccg agtaactncc gtagtcgtaa gttcccgtaa 540  
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<210> 5626

<211> 592

<212> DNA

<213> Homo sapiens

<400> 5626

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gaccatagag ttaaaaacta tcactgttat cgctgtttat ttacaatac ttggttttagt 120  
ctacaagttt aaggcaaaca tactaatgca tttgcttttc ttcagaaatc atacttataa 180  
agattacata aaatctgtcc caaaacgtct aagaaatatt cagtaattaa aaataagtct 240  
gattaagatg ctttaccagg atacatgaat gaactaagggt ggtatatgct tttaaaaaca 300  
aaatttaaaa aattcaaaaa aggcaatctt tatcttgttt caacaatgca ttctgaaaag 360  
gttaaatttc agaaattatt taaaggtaaa taagagtggc agccataagg aatactatct 420  
ataaaaataaa cnggagttat agangctact ttaaggaaga atggactttg ggacttctga 480  
gtatgacnag tgccccgatg atggatcact ggtattgggg aacacagtgc ggattcacgg 540  
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<210> 5627

<211> 575

<212> DNA

<213> Homo sapiens

<400> 5627

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attataaaat ttccattaa cctatcatct aatggttttc acatccaaga aatactgctg 180  
 tctagattca ctacttcatt aagactttca aactttttatt ttttaaaagt ctatcatttc 240  
 ttttgcacct attagctgga aattttccta agaattttcc ctcagttact tggctgccta 300  
 aaatacagtt cataacaaga agggcaggat aaatattata ttctctcctt tatcaatctt 360  
 cagagtaaga atctgatgcc ctagcaaact ctgatggtaa ccaatgagtt tttctggttt 420  
 ccaatattct tttaataggc ttttaatcnt ttggnagatg acaccattat agcccaaacc 480  
 caaaccccat acttggaag tactggtgaa ctgaagccta agttataatc ccatggccca 540  
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<210> 5628

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5628

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 gaccggccta tgaaccactt ttgactcagc ctgggggact gtcttctggg cacagctggc 180  
 agtgggttca cctgaccatg tttagcagca gaagcttcaa ggcctgttcc taattttgta 240  
 ttttcttaag gaaggtecc taaaccacag aagcctcagg cccacaaaaa cctgcatccg 300  
 cccctggctg caggacactc cagggtctgg atgcagccag ggccagccac agcctcacta 360  
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 agagacctnc ttggcctttg cttgggtgat gctgaccac atgganggt ctctggncca 480  
 acaagtctg gggacattcc ctgnatgaag accatatgtc tgacatggca cttggccacc 540  
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<210> 5629

<211> 586

<212> DNA



<213> Homo sapiens

<400> 5629

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tgtacatcat ctccaatcca tattcatcag gagcgccctg gggtttgtca tcctgctggc 180  
acggggccag gtttcagggc ctggcgaaa gaggtctgta ggctttggga cttggtgtct 240  
ggccccttga gatgagatta gttctccaat aacctgaatg cctcttgggg aggcggcagc 300  
acgcaggcgt agaatccctc tagacagcca gatcgggcgt ggggtggggtt taaaccccag 360  
gatgttgcta acagccacaa tgaaagctgg ggggtcanag gtaagaacct gctgagcang 420  
agtggggatc tgcaaaaggg actaaagggg gtagaataat acaaaaaggc caagccataa 480  
ggaaccaa at ggaaaaatat ttctcctggg gtgaaagggc anaagaaan ggaacttngg 540  
ggtagccatg aatgaaaact tangacaaac tttcntaggg acatcg 586

<210> 5630

<211> 572

<212> DNA

<213> Homo sapiens

<400> 5630

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tgtatctatc tgtctatgta tctatctatc tatctatcta gtatatatta aagcaaacaa 180  
agtcaaactc caaatcctc taactcagtt tcagtgggtt tcaactgtatc ttttctaaaa 240  
taaaatttaa aagaaacatt ttaatatatt cattcaatac atgaaaatac acacttttgt 300  
ggatcttggc tgcttcacat atttgaaatg aggactaatg cgaagtatta tcaggttaca 360  
atttttttaa ggcacttctt aattttgtat attaaatttg tgactataca gcaaattttc 420  
tttctataat cattgaagaa tttttgctaa aggaaatatt tttagggtgc tcagatctaa 480  
acagaagtga agttgagaat aaaatttcan ggngnattat ncatatccaa atatgctggc 540

ctacattcnt atattacttt ctaaagggt na

572

<210> 5631

<211> 572

<212> DNA

<213> Homo sapiens

<400> 5631

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 caaactgcaa attactctgt ctcttttctt aatcaatata gcaacagtcc tcagtggtag 180  
 tgcaccactc tggaaaaaat gccttcaggt tccttcccat cccccaaggc agcagcaaat 240  
 ccttcgtgtc gcctctact ggccaaggca gccaaagatt tgaaagtctt tggctcgtag 300  
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 atgagcgctg gatacttcag tccatgttcc tggctagcag ctgnaattcg attaatccag 420  
 agctgaaatn agaaaacatg aagatnctta aaaatgactt ctgggatggt atggnccagc 480  
 aaaagcctnt aatggactaa agaatatatt tctaaaagta aattgccaaa atcagngggc 540  
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<210> 5632

<211> 563

<212> DNA

<213> Homo sapiens

<400> 5632

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 ggccactctg ggcagaaagc aaaggcgcct catggcacct actcanaggc actgaggcca 180  
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aatccaggac ttctgagagc caagccctag ttccaagtca tcctgagtcc aggcctctgcc 300  
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 tttgggtccc acctggggaa ccttaatgac aggaagcnaa acaggncaga tttcttcacg 480  
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 gactttnggg actcttggca aaa 563

<210> 5633

<211> 574

<212> DNA

<213> Homo sapiens

<400> 5633

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 ctttatggct gggtgcagtg gctcacgcct gtaatcccag cactttggga ggctgaggtg 180  
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 atttcaaact ttattatitt atctgnaata gtgatttgga atcagtaatc tttgatggta 480  
 tcctagtaat tggtcctggg gcctaaaagc ccnccatnt aagaangcaa aggaantggt 540  
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<210> 5634

<211> 582

<212> DNA

<213> Homo sapiens

<400> 5634

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ctcagggtgtg ggtgtggcta ttgtggaggc cgtgtctggt gaacctggtg aacttgggtg 120  
tgagcatggt ggcagggagg agagcacctc acgtacaaac tgcacgagct tcgggcgcat 180  
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ctgctcagct cctgaacccg gcccctcctg cctggccacg tccgctatcg caccctcctg 420  
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agtccagca cttgagaaca agttaagtgt nggtgtggct attgtggaag cntgtctgg 540  
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<210> 5635

<211> 583

<212> DNA

<213> Homo sapiens

<400> 5635

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ctatatgtat caaatattaa actcctaaaa caaggtgggt tagggcaaac atggagtatg 120  
gccatataat tgagaatcat actatagttt ttatacagca gtcaagtcac taaaaatggt 180  
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accaccgtcc tctccctgat ggcagaggtc attactggcc tttcacattc aagccatctc 300  
ccagctgtga ctctgggctt gctgcactgt agtgtaggta gtgctttaag gagatgggag 360  
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aaaatctaga aaaaattagg agacatgttt gtggcagaga tcattaactt gagggatccc 480  
tatggnetta acatcagctt ttattctcat gccataagtt agaaacctat tctggaacct 540  
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<210> 5636

<211> 563

<212> DNA

<213> Homo sapiens

<400> 5636

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caaaactggg aatctaaact attatgtgac tgaaaattga tttctaggtc tntgcacagt  180
ccattaactt tatactttta gtttccaaat ctatatatgc cacaacccc aaacataagc  240
atccacatat ttgttctgca tttcctctgt ccatactgga ttagcagaag cattaagtgt  300
tagtgtggca agatggaagg accctgataa catgcctctg taaccatatg taagagtcc   360
attttaaaat tacagacaac acagaaatac ttccgtatga ccctctctga aatgtgaact  420
tttcaggcat gtgaacaata aaaacaaaat gcagaaaata tttcatgaag ctgcactgag  480
caatgccctt aagactggct ttcttgggtt ccctgtccaa tctttagcat cacttttggc  540
agacattaag ctaccagtta ata                                     563
    
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<210> 5637

<211> 575

<212> DNA

<213> Homo sapiens

<400> 5637

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taggcacaca tcaccatttc tggctaattt tttatttttc atggagacaa ggtcttgcta  180
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aagtgtctggg attacaagag taaaccactg agcctggccc tgaaatgctt tttttttttt  300
ttttttaatg aaaatacaag gcatggagat gtggaaagac accttgcttt attactgnta  360
    
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ttattagttc tatagtataa ttcatatatc acaaaaaatca ccatttttaa gcatatattt 420  
cagtgtcttt taccatattc caaaagttct gcaaccatca ccactaccta attccagaat 480  
attttcataa atgccnaaaa gcatgcctgn acctatnggc aggcactntt caattncccc 540  
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<210> 5638

<211> 585

<212> DNA

<213> Homo sapiens

<400> 5638

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tgccttaagt taaccaagca ttttgataac acattcaaat ttaatatata aaaatagatg 180  
tatcctggaa gatataatga agaacatgcc atgtgtataa attcagaata cgctttttac 240  
acaagaact acaaaaagtt acaaagacag ctttcaggaa ccacacttag gaaaagtgag 300  
ccgagcagcc ttcacgcaaa gcctccttca aagaagtctc acaaagactc cagaaccagc 360  
cgagtctgtg aaaaaggaat tccaggtttt catcaggttg aaattagtta caaatgaagg 420  
agattaactc ggggtggtgct gaaaaatctc agccctcagc attcctgggn aaanccgcct 480  
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<210> 5639

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5639

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<210> 5640

<211> 577

<212> DNA

<213> Homo sapiens

<400> 5640

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 aaagtgcatt ttttccagtt ttttagggaa aaggagatac ttcaccagga ggataaaaag 180  
 gaacaagagg ggaaggggaa ataaaaattc cagaaagatg aaaaattggt gatgtaagat 240  
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 agatattcag caaggaaaga aaagaaaact cctaaaagaa acagcagttg ccttaaacca 480  
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<210> 5641

<211> 589

<212> DNA

<213> Homo sapiens

<400> 5641

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gccagtacag aagccaaatg tagccccagc cctagactcc agcccaggca gagtccaagg 180
gaggggtgtc agggtcagaa gtcacaggga gcccagtgac tatcaagggtg gctgagagca 240
aggctagggt agggatgggg cagagaaagg gcaggggggtg cagccccagg tggcccaaag 300
caacacagag gagcaagggc tggcattcaa gtcagcaggt ccctggggag aacagatggt 360
gcctggagtc ccacatggtg gtacagggtg gggagcttct tgggtggcagg cagcacccca 420
ggaggaatgg gactncttgc cgangctgac ccaacttcaa ggctgccaag ttctgatggg 480
aatgtcctct tcangacatt tccagccccg gacgaacaaa agccttgagg aattgggatt 540
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<210> 5642

<211> 580

<212> DNA

<213> Homo sapiens

<400> 5642

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gcctctaaat ttgcaggccc accccaaact gttcctaaaa gatctctttc gttctgtaat 180
gcttcctcca aatatagctc tctgcctgaa caaacagatt tttcaaagc tctaattact 240
tccggtggcc cttggatgaa ttgctttagc cattcttggt cctcttctag agatttagtt 300
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gtttaagggc cccactcaac actttgagag cttgtctact tccgattatt tcaactagcc 420
cgggtgggcc accccagctt ggtattatgc ccatctcttt gtggacgaat ctgatcttac 480

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tctctgggag cattaacctg gaatcacatg ctgnagtaaa atctgntctt canccaatgg 540  
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<210> 5643

<211> 576

<212> DNA

<213> Homo sapiens

<400> 5643



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ttacaggccc tgccaccacc cccccgtaa tttttgtcta tttttttttt ttagtagaga 180  
cgggggtttca ccatgttggc tagtctgggc ttgaactcct gactgacctc agacgaacca 240  
cccgcctcag actcccaaag tgcaggatt acaggcgta gccaccatac ctggcctgct 300  
cccagttttt acaagatgtt aattcccaat aatctgagag caatgtgtta atatgaatat 360  
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tccaatagta taatagaaag actattagta agaatgccag aaggncagtc tcatgcacct 480  
ggtgaaataa accaaccaac caacctgaan tctaaagctt gngtggcaag taccactgtg 540  
gggaagtgtga gaattaacnc tcttttccta agggtc 576



<210> 5644

<211> 595

<212> DNA

<213> Homo sapiens

<400> 5644

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tcaattattt ttcaaaatat tctcaatgca cattatcctt aattccctta ttatagttaa 180

acatacaaat acagaaaaat accccattta acaaatacta gtgttaaag gttatttggc 240  
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 tattatatta aacaaattca ttctgctaaa acatgtaaag aatttcatcc atcatgtatt 360  
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 caaagagttg tcttagatat aacctcatcc tcttcccaa cacacttcat tccaaagtct 480  
 ggtcaacaga tggcaaccgc ggtagcagtc actttancat ctggatgccn gtgggttccg 540  
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<210> 5645

<211> 582

<212> DNA

<213> Homo sapiens

<400> 5645

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 atacgacat tctttttcac tctgaattgt tttcaaattt ttcacgtatg tacacctcgt 180  
 acccccaaaa accatatcgg ccttaatagt atgaaatgca tctatttcc tttgtatttc 240  
 actaagcaaa ttatttttaa aatactttat ttcatttgat caggacgatc tgtgtaagga 300  
 gacacatttc acaattcccc taacctccat caggaaacca gccaaagtct ggctcaccca 360  
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 gaaggtctgc ctttccattt ctcacagtga caaacacat gggcttgcat tacacatact 480  
 tcaggctgat gactgggaat acncatatat taggttcac aatcgctcac ttggttcaag 540  
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<210> 5646

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5646

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 acaccggact ctccaggttaa tgtctangta aaggaccccg canggtgcct tcattcctta 480  
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<210> 5647

<211> 588

<212> DNA

<213> Homo sapiens

<400> 5647

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 gaatcaaaat gggagttaat acaagtgtat aaatgacaat taatgcattg gacagtttga 180  
 ttgttcatcc aaattttgat atatctcact aacagcatgc aaggaggctt aacagaactc 240  
 tgtatggaaa caggttggag gtaggttaaag cagaatgtct ggatctacgt tgatactgag 300  
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 catatgaggc ctcggaagg gggtaatgcc tttatcttcc attttaagga aaagaatgac 480  
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<210> 5648

<211> 517

<212> DNA

<213> Homo sapiens

<400> 5648

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gggaccatag gcgtgcccc aacacactgg ctaatttttg tttttttgt agagacaggg  180
tttcccatg ttgccagac cggctctgaa ctcttagact caagcaatcc tcctggctca  240
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catacaaaag gtagtcttga ggaccatgct tcanaactat ggctgttgnc accctgcttg  480
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<210> 5649

<211> 576

<212> DNA

<213> Homo sapiens

<400> 5649

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ttagaaaatt actacttggt catgataaaa attttaagta atgcaaaaga gaacaaggta  180
aaaacaaaag ccaccatgct ttggcccct tccaatcctc agcagtgtcc actggttaaca  240
tttcttgaat atgcagagat tgtctttttc aaagagatgc tattaataaa ttaaggcctc  300
tggggttgaa agagtaaagg agacttctga cccttcttta gtgcactccg tggaggtcac  360

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tatcagatct catctggcct gactggctat cagcaacact aggaataagt gttaggaaaa 420  
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 aataggatgg ncctggactt accaaataag ccctggatga agtcnaaatc taagaccctt 540  
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<210> 5650

<211> 573

<212> DNA

<213> Homo sapiens

<400> 5650

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 actataggtg cccaccacca tgcttggtta attttttgtt gtatttttag tagagacggg 180  
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 tatagggtag ttttaacaac ctgtcttcca agggacaacg tcagttagaa aatgggaagg 480  
 genttagact tnttgaaccc cctttaaac ggaccttgga acttnggga tnccaaggnn 540  
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<210> 5651

<211> 575

<212> DNA

<213> Homo sapiens

<400> 5651

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 acaggcacac gccaccacgc ccagctaatt tttgtatctt tagcagagac ggggtttcac 180  
 aatgttggtc aggatgggtc cgatctcctg accccgtgat ctgcccgcct cggcctctca 240  
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 aaacaagaag tccaaaattc aaatcacaca ccaacgcggg tctttctgca ttcaaggcaa 480  
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<210> 5652

<211> 570

<212> DNA

<213> Homo sapiens

<400> 5652

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 aaagtatttc tcttcttgaa aatattttta aatacaattg cagtaaaaac aattgcatgt 180  
 agacattatt ctccatctgt tttttttgta ggagactgtg gaagacagga gggagttggg 240  
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 tgggactccg tactcagggt actttctggt taaaaatatt gaagacggat gacaactggg 360  
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<210> 5653

<211> 569

<212> DNA

<213> Homo sapiens

<400> 5653

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atcaaaataa tttctgaant gtttcatatg aaacatagac aaagcantaa aaagaggata  480
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<210> 5654

<211> 565

<212> DNA

<213> Homo sapiens

<400> 5654

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gtgcacttag cagcaggggc cacagttctc ccataaatc tcgagcattt tttccattca  180
aaaatccagt caggttgatt tgcatcattt tggagtctgg attctgcaa aagacacgac  240
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atttaaatta gtatttttta agtctacat aggggcttag acatatatat agtccttact  360
attttacaaa tagtcttccc tagtagcttc tcagcaatat aatctctaac agattaccaa  420
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<210> 5655

<211> 580

<212> DNA

<213> Homo sapiens

<400> 5655

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gttacaggcg cctgacacca cgcctgggta atttttgtat ttttagtaga gatgggattt 180  
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<210> 5656

<211> 571

<212> DNA

<213> Homo sapiens

<400> 5656

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aatctccaca ttgtgaactt gatgctggtg ttcttccatc tcagccacaa ctttctctc 180